



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

NYPL RESEARCH LIBRARIES



3 3433 09074484 2

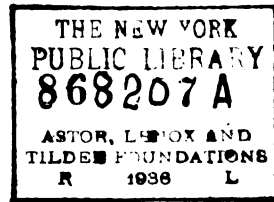
VDT
+
Who's

WHO'S WHO
IN
AMERICAN AERONAUTICS

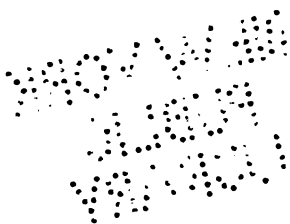
Compiled by
Lester D. Gardner
Publisher of Aviation



The Gardner, Moffat Co.
225 Fourth Ave.
New York
1922



Copyright 1922
by
The Gardner, Moffat Co., Inc.



Publishers' Note

With full knowledge of the many omissions in the list of those who have participated in the aeronautical history of this country, this first issue of "Who's Who in American Aeronautics" is published. During 1921 these biographical sketches have been appearing weekly in AVIATION. While requests have been sent to practically every person prominent in American Aeronautics, many replies have been received too late to be included in this edition, and many persons have moved so that their addresses are not at present available. In future issues, it is hoped, the more important omissions will be filled.

The size of the pictures that have been used do not indicate the relative importance of the subject in the aviation world. These illustrations have been used previously in AVIATION and are reproduced without alteration in size. In later editions it is planned to include the pictures of many persons whose photographs are not as yet available.

While every precaution has been taken to insure accuracy and personal revision, as is natural in such a work many minor mistakes will occur. It is requested that any errors noted be sent to the Editor.

It is hoped that the beginning which has been made will prove of great value in promoting acquaintance among those who are helping to advance aviation in this country.

TABLE OF CONTENTS

	PAGE
1. Personnel of Army Air Service	1
2. Personnel of Air Mail Service	8
3. Personnel of Navy Bureau of Aeronautics	9
4. Personnel of National Advisory Committee for Aeronautics	10
5. Personnel of Officers and Committees, Aero Club of America	11
6. Personnel of Officers and Committees, other Aero Clubs	12
7. Personnel of Aeronautical Chamber of Commerce	15
8. Personnel of State and Municipal Aviation Commissions	17
9. Personnel of Manufacturers Aircraft Association	17
10. Personnel of Aircraft Underwriters' Association	17
11. Who's Who in American Aeronautics	19
12. Aeronautical Advertising	110

PERSONNEL OF ARMY AIR SERVICE

OFFICE OF THE CHIEF OF AIR SERVICE

Chief of Air Service
Maj. Gen. Mason M. Patrick

Assistant Chief of Air Service
Brig. Gen. William Mitchell

Executive

Maj. Walter H. Frank
Maj. Hubert H. Harmon, Assistant
Maj. Jenner Y. Chisum, Chief, Finance Section
Capt. William F. Volandt, Finance Section
Col. Albert E. Truby, Chief, Medical Section
Maj. Benjamin B. Warriner, Medical Section
Capt. William J. Freebourn, Medical Section
Maj. Henry W. Harms, Engineering Representative
1st Lt. Ernest E. Harmon, Engineering Representative
1st Lt. Clayton L. Bissell, Engineering Representative

Personnel Division

Maj. Rush B. Lincoln, Chief
Maj. J. W. Simons, Jr.
1st Lt. George E. Hodge

Information Division

Maj. Horace M. Hickam, Chief
Capt. David S. Seaton
1st Lt. Charles H. Mills

Training and War Plans Division

Lt. Col. James E. Fechet, Chief
Maj. Herbert A. Dargue
Maj. Walter G. Kilner
Maj. Percy E. Van Nostrand
Maj. Leo A. Walton
Maj. Oscar Westover
Maj. Barton K. Yount
Capt. Oliver S. Ferson
Capt. Burdette S. Wright

1st Lt. Robert J. Brown, Jr.
1st Lt. William E. Connolly
1st Lt. Horace S. Kenyon

Supply Division

Lt. Col. William E. Gilmore, Chief
Lt. Col. Harry Graham
Maj. Roy M. Jones
Maj. George E. A. Reinburg
Maj. J. A. Mars
Capt. Frederick F. Christine
Capt. Aubrey I. Eagle
1st Lt. William V. Andrews
1st Lt. Charles G. Brenneman
1st Lt. Edwin F. Carey
1st Lt. Aaron E. Jones
1st Lt. Benjamin R. Morton
1st Lt. Edwin R. Page

Engineering Division

Maj. Thurman H. Bane

LOCATION OF ORGANIZATIONS

WINGS

1st Kelly Field, Tex.
2d Active Associate, Hq. 1st Wing.

GROUPS

1st (Pursuit) Ellington Field, Tex.
2d (Bombardment) Kelly Field, Tex.
3d (Attack) Kelly Field, Tex.
4th (Observation) Manila, P. I.
5th (Observation) Luke Field, Hawaii.
6th (Observation) France Field, Canal Zone.
7th (Observation) Active Associate, Hq. 1st Group

SQUADRONS

1st (Observation) Mitchell Field, L. Is.
2d (Observation) Kindley Field, P. I.
3d (Pursuit) Clark Field, P. I.
4th (Observation) Luke Field, Hawaii.
5th (Observation) Mitchell Field, L. Is.
6th (Pursuit) Luke Field, Hawaii.
7th (Observation) France Field, Canal Zone.
8th (Attack) Kelly Field, Tex.
9th (Observation) Mather Field, Calif.
11th (Bombardment) Kelly Field, Tex.
12th (Observation) Ft. Bliss, Tex.
13th (Attack) Kelly Field, Tex.
14th (Bombardment) Langley Field, Va.
Flight B Aberdeen Proving Ground, Md.
15th (Observation) Chanute Field, Ill.
17th (Pursuit) Ellington Field, Tex.
18th (Observation) Rockwell Field, Calif.
19th (Pursuit) March Field, Calif.
20th (Bombardment) Kelly Field, Tex.
22d (Observation) Montgomery, Ala.

23d (Bombardment) March Field, Calif.
24th (Pursuit) Mitchell Field, L. Is.
25th (Bombardment) Mitchell Field, L. Is.
26th (Attack) Kelly Field, Tex.
27th (Pursuit) Ellington Field, Tex.
28th (Bombardment) Mather Field, Calif.
49th (Bombardment) Kelly Field, Tex.
50th (Observation) Langley Field, Va.
88th (Observation) Camp Knox, Ky.
90th (Attack) Kelly Field, Tex.
91st (Observation) Crissy Field, Calif.
94th (Pursuit) Ellington Field, Tex.
95th (Pursuit) Ellington Field, Tex.
96th (Bombardment) Kelly Field, Tex.
99th (Observation) Bolling Field, D. C.

AIR PARKS

No. 1 Bolling Field, D. C.
No. 2 Ellington Field, Tex.
No. 3 Langley Field, Va.
No. 4 Kelly Field, Tex.
No. 5 Kelly Field, Tex.
No. 6 Mitchell Field, L. Is.
No. 7 Mitchell Field, L. Is.
No. 10 Luke Field, Hawaii.
No. 11 Clark Field, P. I.

AIRSHIP COMPANIES

No. 8 Brooks Field, Tex.
No. 9 Scott Field, Ill.
No. 10 Langley Field, Va.
No. 12 Scott Field, Ill.
No. 16 Brooks Field, Tex.
No. 18 Aberdeen Proving Ground, Md.
No. 19 Langley Field, Va.

BALLOON COMPANIES

No. 1 Ross Field, Calif.

No. 3 Fort Ruger, Hawaii.
No. 4 Brooks Field, Tex.
No. 5 Brooks Field, Tex.
No. 6 Active Associate No. 20.
No. 7 Active Associate No. 23.
No. 11 Active Associate No. 23.
No. 13 Ross Field, Calif.
No. 14 Active Associate No. 1.
No. 15 Active Associate No. 13.
No. 17 Kindley Field, P. I.
No. 20 Lee Hall, Va.
No. 21 Fort Kamehameha, Hawaii.
No. 22 Lee Hall, Va.
No. 23 Post Field, Okla.
No. 24 Active Associate No. 1.
No. 25 Active Associate No. 13.
No. 26 Active Associate No. 20.
No. 27 Kindley Field, P. I.
No. 28 Active Associate No. 22.
No. 29 Active Associate No. 20.
No. 30 Active Associate No. 22.
No. 31 Active Associate No. 20.
No. 32 Active Associate No. 20.

PHOTO SECTIONS

No. 1 Kelly Field, Tex.
No. 2 Kelly Field, Tex.
No. 3 Bolling Field, D. C.
No. 4 Post Field, Okla.
No. 5 Chanute Field, Ill.
No. 6 Clark Field, P. I.
No. 7 Camp Knox, Ky.
No. 8 Mitchell Field, L. Is.
No. 11 Luke Field, Hawaii.
No. 12 France Field, Canal Zone.
No. 14 Mitchell Field, L. I., N. Y.
No. 15 Crissy Field, Calif.
Units shown in italics are inactive.

DIRECTORY OF AIR SERVICE OFFICERS

Abbey, Evers Air-Plt. 1st Lt. Langley Fld., Hampton, Va.
Abbey, Henry Jr. Air-Plt. Major Mitchell Fld., Long Island, N. Y.
Adams, James E. Air-Plt. 1st Lt. Chanute Fld., Rantoul, Ill.
Adams, Morton D. Air-Plt. 1st Lt. Carlstrom Fld., Arcadia, Fla.
Adler, Elmer E. Air-Plt. Capt. Fairfield Air Intermediate Depot, Fairfield, Ohio.
Agee, William T. Air-Plt. 1st Lt. Honolulu, H. T.
Albro, Ames S. Air-Plt. 1st Lt. O.C.A.S., Washington, D. C.
Albrook, Frank P. Air-Plt. 1st Lt. France Field, Cristobal, C. Z.
Aldrin, Edwin E. Air-Plt. 1st Lt. Eng. Division, Dayton, Ohio
Aldworth, Richard T. Air-Plt. 1st Lt. Ellington Fld., Houston, Tex.
Allen, Truman W. Air-Plt. Capt. Mitchell Fld., L. I., N. Y.
Amberg, Irwin S. Air-Plt. 1st Lt. Godman Fld., West Point, Kentucky
Amis, William Noel Air-Plt. 1st Lt. Honolulu, H. T.
Airship-Plt (BO) 1st Lt. Langley Fld., Hampton, Va.
Andrews, Frank M. Air-Plt. Major A. F. in G., Coblenz, Germany.
Andrews, Leland S. Air-Plt. 1st Lt. Ellington Fld., Houston, Texas
Andrews, William V. Air-Plt. 1st Lt. O.C.A.S. Washington, D. C.
Archer, Cecil E. Air-Plt. 2d Lt. Eng. Division, Dayton, Ohio
Arnold, Henry H. Air-Plt. Major 9th Corps Area, Presidio of San Francisco, Calif.
Arnold, Leslie P. Air-Plt. 1st Lt. Langley Fld., Hampton, Va.
Arthur, Dogan H. Air-Plt. 1st Lt. A. F. in G., Coblenz, Germany
Asp, Melvin B. Air-Plt. 1st Lt. Ellington Fld., Houston, Tex.
Atkinson, Bert M. Air-Plt. Major Mather Fld., Sacramento, Calif.
Austin, Charles B. Air-Plt. 1st Lt. Langley Fld., Hampton, Va.
Austin, Fred Air-Plt. 1st Lt. Honolulu, H. T. (Letterman Gen. Hosp. Calif. for treatment).
Axtater, Karl S. Ball-Obs. 1st Lt. Ross Fld., Arcadia, Calif.
Baez, Raphael Jr. Air-Plt. 1st Lt. Manila, P. I.
Bailey, Joseph P. 1st Lt. Ross Fld., Arcadia, Calif.

Baker, Alfred B. Air-Plt. 1st Lt. Bolling Fld., Anacostia, D. C.
Baldwin, Theodore A., Jr. Ball-Obs. Col. Ross Fld., Arcadia, Calif.
Balfour, Max Air-Plt. 1st Lt. C/o Asst. Military Attache American Embassy, Paris, France
Ballard, Audrey B. Air-Plt. 1st Lt. March Fld., Riverside, Calif.
***Ballard, Richard H.** Capt. Carlstrom Fld., Arcadia, Fla.
Ballard, Gerald E. Air-Plt. 1st Lt. Fairfield Air Intermediate Depot, Fairfield, Ohio.
Bamberger, Raymond S. Ball-Obs. Major Adjutant General's Office, Washington, D. C.
Bane, Thurman H. Air-Plt. Major Eng. Div., Dayton, Ohio
Banfill, Charles Y. Air-Plt. 1st Lt. Honolulu, H. T.
Barker, John D. Air-Plt. 1st Lt. France Fld., Cristobal, C. Z.
Barksdale, Eugene H. Air-Plt. 1st Lt. Mitchell Fld., L. I., N. Y.
Barnett, Lloyd Air-Plt. 1st Lt. Montgomery Air Intermediate Depot, Montgomery, Ala.
Barney, Oscar N. 1st Lt. Carlstrom Fld., Arcadia, Fla.
***Barriger, John D.** 1st Lt. Carlstrom Fld., Arcadia, Fla.
Barry, Archie W. Ball-Obs. Major Ross Fld., Arcadia, Calif.
Barlett, Frank M. Air-Plt. 1st Lt. Manila, P. I.
Barrett, Carl H. 1st Lt. Kelly Fld., San Antonio, Tex.
Bartron, Harold A. Air-Plt. 1st Lt. Fairfield Air Intermediate Depot, Fairfield, Ohio.
Batten, Eugene C. Air-Plt. 1st Lt. Crissy Fld., Presidio of San Francisco, Calif.
Baucom, Byrne V. Air-Plt. Capt. Ellington Fld., Houston, Texas
Bayley, Eugene B. Air-Plt. 1st Lt. Mather Fld., Sacramento, Calif.
Beam, Rosenham Air-Plt. Capt. Godman Fld., West Point, Ky.
Beaton, Harold W. Air-Plt. 1st Lt. Bolling Field, Anacostia, D. C.
Beau, Lucas V. Jr. Air-Plt. 1st Lt. Mitchell Fld., L. I., N. Y.
Beck, Paul W. Air-Plt. Lt. Col. Post Fld., Ft. Sill, Okla.
Beery, Levi L. Air-Plt. 1st Lt. Kelly Fld., San Antonio, Texas

Digitized by Google

Eaton, Samuel C. Jr.	Air-Pit.	1st Lt.	Godman Fld., West Point, Ky.
Ebert, Solomon B.	Air-Pit.	1st Lt.	Post Field, Ft. Sill, Okla.
Echols, Oliver P.	Air-Pit.	Capt.	Kelly Fld., San Antonio, Tex.
Edwards, Idwal H.	Air-Pit.	Capt.	Manila, P. I.
Eglin, Frederick I.	Air-Pit.	Capt.	March Fld., Riverside, Calif.
Eldridge, James Sharp	Air-Pit.	1st Lt.	ASMS, Chanute Fld., Rantoul, Ill.
Elleman, Clifford	Air-Pit.	1st Lt.	Richmond Air Intermediate Depot, Richmond, Va.
Eller, Louis N.	Air-Pit.	1st Lt.	ASMS, Chanute Fld., Rantoul, Ill.
Ellicott, Charles G.	Air-Pit.	1st Lt.	Manila, P. I.
Elliott, Marion L.	Air-Pit.	1st Lt.	Honolulu, H. T.
Ellis, Sam L.	Air-Pit.	1st Lt.	Ellington Field, Houston, Tex.
Elmendorf, Hugh M.	Air-Pit.	Capt.	Ellington Field, Houston, Tex.
Elston, Welcome B.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio
Emmons, Delos C.	Air-Pit.	Major	Eng. Division, Dayton, Ohio
Ennis, Arthur I.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Ervin, Robert G.	Air-Pit.	Capt.	Manila, P. I.
Estabrook, Merrick G. Jr.	Pit.	1st Lt.	OCAS Washington, D. C.
Etheridge, Ast J.	Air-Pit.	Capt.	Ross Fld., Arcadia, Calif.
Eubank, Eugene L.	Air-Pit.	1st Lt.	ASMS, Chanute Fld., Rantoul, Ill.
Evans, Charles Reed	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Evans, Frederick W.	Ball-Obs.	1st Lt.	Langley Fld., Hampton, Va.
Evert, Paul	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Fairchild, Muir S.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio
Farnum, William C.	Ball-Obs.	1st Lt.	Langley Fld., Hampton, Va.
Farthing, William E.	Air-Pit.	Capt.	Ellington Field, Houston, Tex.
Fastenau, Karl Dev.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio
Fechot, James E.	Air-Pit.	Lt. Col.	OCAS Washington, D. C.
Fenn, Clarence C. (Inf.)	Air-Pit.	Capt.	McCook Fld., Dayton, Ohio
Fernsten, Edward L.	Ball-Obs.	1st Lt.	8th Airship Co., Ft. Bliss, Tex.
Ferson, Oliver S.	Air-Pit.	Capt.	OCAS Washington, D. C.
Fickel, Jacob E.	Air-Pit.	Major	U.S.S.P. Corp., Portland, Oregon
Finley, Robert H.	Pit. (BO)	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Finn, Matthew E.	Air-Pit.	1st Lt.	Post Field, Ft. Sill, Okla.
Finter, Clyde V.	Air-Pit.	Capt.	Mitchel Fld., L. I., N. Y.
Fishback, Fred C.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
*Fisher Arthur G.	Pit. (BO)	Lt. Col.	Langley Fld., Hampton, Va.
Fitzgerald, Donald D.	Air-Pit.	1st Lt.	F.A. School, Ft. Sill, Okla.
Fitzgerald, Shepler W.	Air-Pit.	Major	Rockwell Air Intermediate Depot, Rockwell Fld., San Diego, Calif.
Fitzpatrick, Gerald H.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Fitzmaurice, William J.	Air-Pit.	Major	Montgomery Air Intermediate Depot, Montgomery, Ala.
Fleet, Reuben Hollis	Air-Pit.	Capt.	Eng. Division, Dayton, Ohio
Flannery, James	Air-Pit.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Fletcher, Wallace R.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio
Flickinger, Harrison W.	Pit.	Capt.	France Field, Cristobal, C. Z.
Flood, William J.	Ball-Obs.	1st Lt.	Ross Fld., Arcadia, Calif.
Flounders, Harry B.	Air-Pit.	Capt.	Godman Fld., West Point, Ky.
Ford, Christopher W.	Air-Pit.	Capt.	Carlstrom Fld., Arcadia, Fla.
Forrest, Charles Rocheid	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Foster, Angier Hobbs	Ball-Obs.	1st Lt.	Scott Fld., Belleville, Ill.
Foster, Arthur L.	Air-Pit.	1st Lt.	France Field, Cristobal, C. Z.
Foster, Thad V.	Air-Pit.	1st Lt.	Honolulu, H. T.
Foulk, Albert C.	Air-Pit.	1st Lt.	McCook Fld., Eng. Division
Foulois, Benj. D.	Air-Pit.	Major	American Mission, Berlin, Germany
Fox, Russell R.	Air-Pit.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Frank, Walter H.	Air-Pit.	Major	OCAS Washington, D. C.
Franklin, Elbert W.	Air-Pit.	1st Lt.	Manila, P. I.
Fraser, Kenneth G.	Air-Pit.	1st Lt.	McCook Fld., Dayton, Ohio
Fravel, Ira F.	Pit. (BO)	Lt. Col.	G.S.S. Ft. Leavenworth, Kans.
Frederick, Wallis A.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Frierson, Samuel G.	Air-Pit.	1st Lt.	Ellington Field, Houston, Tex.
Frost, Ezra R. Jr.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Fry, Carl B.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Gabriel, William C.	Air-Pit.	1st Lt.	Post Field, Ft. Sill, Okla.
Gaffney, Dale V.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Gaines, Edmund P.	Air-Pit.	1st Lt.	Pope Fld., Fayetteville, N. C.
Gale, Guy H.	Air-Pit.	1st Lt.	Honolulu, H. T.
*Galloway, Floyd E.	Air-Pit.	Capt.	Carlstrom Fld., Arcadia, Fla.
Gardner, Grandison	Air-Pit.	1st Lt.	McCook Fld., Dayton, Ohio
Gardner, John H.	Air-Pit.	1st Lt.	Post Field, Ft. Sill, Okla.
Garrey, Raynor	Air-Pit.	1st Lt.	Middletown Air Intermediate Depot, Middletown, Pa.
Garrett, Kenneth	Air-Pit.	1st Lt.	France Fld., Cristobal, C. Z.
Garrison, William H. Jr.	Pit.	Major	San Antonio Air Intermediate Depot, San Antonio, Tex.
Gates, Byron E.	Air-Pit.	1st Lt.	Depot, San Antonio, Tex.
Gates, Warner B.	Ball-Obs.	Capt.	Kelly Fld., San Antonio, Tex.
Gearhart, Guy L.	Air-Pit.	Major	Ross Fld., Arcadia, Calif.
Geiger, Harold	Pit. (BO)	Major	Fanningdale, L. I., N. Y.
George, Alfred C.	Air-Obs.	Capt.	American Mission, Berlin, Germany.
George, Harold H.	Air-Pit.	Capt.	France Field, Cristobal, C. Z.
George, Harold Lee	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Getchell, Charles W.	Air-Pit.	1st Lt.	Aberdeen Prov. Ground, Aberdeen, Md.
Gibson, Ralph A.	Air-Pit.	Capt.	8th Corps Area, Ft. Sam Houston, Tex.
Giffin, Calvin E.	Air-Pit.	Capt.	Scott Fld., Belleville, Ill.
Gilbert, Thomas L.	Air-Pit.	1st Lt.	F.A. School, Ft. Sill, Okla.
Gilkeson, Adlai H.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Giles, Barney McK.	Air-Pit.	Major	Manila, P. I.
Giles, Benjamin F.	Air-Pit.	1st Lt.	San Antonio Air Intermediate Depot, Kelly Fld., San Antonio, Texas.
Gillmore, William E.	Air-Pit.	Capt.	Carlstrom Fld., Arcadia, Fla.
Givens, James D.	Air-Pit.	Lt. Col.	OCAS Washington, D. C.
Glascok, John R.	Air-Pit.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Glenn, Edgar E.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Goddard, George W.	Air-Pit.	1st Lt.	Ellington Field, Houston, Tex.
Goldborough, William C.	Pit.	1st Lt.	Bolling Fld., Anacostia, D. C.
†Goodier, Lewis E. Jr.	Pit.	1st Lt.	Crissy Fld., San Francisco, Calif.
Goodrich, David W.	Air-Pit.	Capt.	Georgia School Technology, Atlanta, Ga.
Goodrich, Donald R.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Goodrick, Robert E. M.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
*Gorman, Karl H.	Air-Pit.	Major	F.A. School, Ft. Sill, Okla.
Gothlin, Oliver P.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Gottschalk, Oliver A.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Graham, Harry	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Graveley, William S.	Air-Obs.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Graves, Gilbert S. Jr.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Gray, Hawthorne C.	Ball-Obs.	Capt.	Ross Fld., Arcadia, Calif.
Gray, William A.	Ball-Obs.	1st Lt.	Manila, P. I.
Graybeal, Carlyle W.	Air-Pit.	1st Lt.	Aberdeen Prov. Ground, Aberdeen, Md.
Greene, Carl F.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Greenslade, Russell M.	Air-Pit.	1st Lt.	A. F. in G., Coblenz, Germany
Greer, Jack	Air-Pit.	1st Lt.	Middletown Air Intermediate Depot, Middletown, Pa.
Griffin, Benjamin F.	Air-Pit.	1st Lt.	F.A. School, Ft. Sill, Okla.
Grimes, Gerald E.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Grisham, James L.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Guldera, Albert M.	Air-Obs.	Capt.	Ellington Fld., Houston, Texas.
Gullet, Edward H.	Air-Pit.	1st Lt.	Manila, P. I.
Gullet, Faye S.	Air-Pit.	1st Lt.	Mather Fld., Sacramento, Calif.
Hackett, Frank D.	Air-Pit.	1st Lt.	Crissy Fld., Presidio of San Francisco, Calif.
*Haddock, Garth B.	Ball-Obs.	Capt.	ABS, Ross Fld., Arcadia, Calif.
Haddon, Julian B.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Haight, Edward M.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Hale, Frazer	Air-Pit.	Capt.	Langley Fld., Hampton, Va.
*Hall, Blackburn	Air-Pit.	Major	Kelly Fld., San Antonio, Tex.
Hall, Chalmers G.	Ball-Obs.	Col.	OCAS Washington, D. C.
Hall, John R.	Ball-Obs.	1st Lt.	(TD Langley F.)
Hall, Melvin A.	MA	Major	Ft. Omaha, Nebr.
Hallett, George E. A.	Air-Pit.	Capt.	2nd Corps Area, Governors Island, N. Y.
Halverson, Harry A.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio
Hamilton, Arthur G.	Air-Pit.	1st Lt.	9th Corps Area, Presidio of San Francisco, Calif.
Hamlin, Winfield S.	Air-Pit.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Hammond, James W.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Hanley, Thomas J. Jr.	Air-Pit.	Major	Langley Fld., Hampton, Va.
Hanlon, William J.	Air-Pit.	1st Lt.	(To sail Manila Dec. 11)
Harbeck, Edward V.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Harmon, Ernest E.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Harmon, Hubert, R.	Air-Pit.	Major	OCAS Washington, D. C.
Harmon, Millard F. Jr.	Air-Pit.	Major	OCAS Washington, D. C.
Harns, Henry W.	Air-Pit.	Major	OCAS Washington, D. C.
Harper, Earle G.	Air-Pit.	1st Lt.	F.A. School, Ft. Sill, Okla.
Harris, Harold R.	Air-Pit.	1st Lt.	(Upon compl. course ord. to OCAS Wash. D. C.)
Harris, Roy G.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio
Hart, John V.	Air-Pit.	1st Lt.	San Antonio Air Intermediate Depot, Kelly Fld., San Antonio, Tex.
Harvey, Lloyd L.	Air-Pit.	Capt.	March Fld., Riverside, Calif.
Haskins, George W.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Hastey, Thomas W.	Air-Pit.	Capt.	Eng. Division, Dayton, Ohio
*Hayes, Wolcott P.	Air-Pit.	Capt.	12th Sqd. (Obs.), Airdrome, Ft. Bliss, Tex.
Haynes, Caleb V.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Haynes, Grissom E.	Air-Pit.	1st Lt.	Fairfield Air Intermediate Depot, Fairfield, Ohio.
Hayward, William A.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Heald, Robert S.	Ball-Obs.	1st Lt.	Kelly Fld., San Antonio, Tex.
Healy, James A.	Air-Pit. (BO)	1st Lt.	Lee Hall, Va.
Hebbard, Albert F.	Ball-Obs.	1st Lt.	Ross Fld., Arcadia, Calif.
*Hecox, Floyd C.	Air-Pit.	Major	Honolulu, H. T.
Hefferman, Leo G.	Air-Pit.	Major	Carlstrom Fld., Arcadia, Fla.
Heffly, Arthur S.	Air-Pit.	Major	Kelly Fld., San Antonio, Tex.
Hegenberger, Albert F.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Heisen, Horace N.	Air-Pit.	Capt.	McCook Fld., Dayton, Ohio.
Hendley, Robert C.	Air-Pit.	2nd Lt.	Langley Fld., Hampton, Va.
Hensley, W. N. Jr.	Pit. (BO)	Major	Carlstrom Fld., Arcadia, Fla.
Harold, Armin F.	Air-Pit. (AO)	Capt.	G.S.S. Ft. Leavenworth, Kans.
Hewitt, Leland R.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Hickam, Horace M.	Air-Pit.	Major	Carlstrom Fld., Arcadia, Fla.
Hickey, Lawrence P.	Air-Obs.	Capt.	OCAS Washington, D. C.
Hicks, Ronald A.	Air-Pit.	1st Lt.	Ellington Fld., Houston, Texas.
Hildreth, Edward E.	Air-Pit.	1st Lt.	(Temp. duty Yale Univ., New Haven, Conn.)
*Hill, Edmund W.	Ball-Obs.	Capt.	Ellington Field, Houston, Tex.
Hill, Ployer P.	Air-Pit.	1st Lt.	Little Rock Air Intermediate Depot, Little Rock, Ark.
Hill, James H. C.	Ball-Obs.	1st Lt.	ABS, Ross Fld., Arcadia, Calif.
Hill, Roland E.	Air-Pit.	1st Lt.	A. F. in G., Coblenz, Germany
Hillery, Edward A.	Air-Pit.	1st Lt.	Scott Fld., Belleville, Ill.
Hine, Harold K.	Ball-Obs.	1st Lt.	Middletown Air Intermediate Depot, Middletown, Pa.
Hine, Virgil	Air-Pit.	1st Lt.	(TD Bolling Fld.)
Hinkle, Stacy C.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Hoag, Earl S.	Air-Pit.	1st Lt.	Brooks Fld., San Antonio, Tex.
Hobley, Alfred H.	Air-Pit.	1st Lt.	Manila, P. I.
Hodge, George E.	Air-Pit.	1st Lt.	12th Squadron (Obs) Ft. Bliss, Tex.
Hodges, James P.	Air-Pit.	1st Lt.	3rd Corps Area, Ft. Howard, Md.
Hoffman, Edward L.	Air-Pit.	Major	Eng. Division, Dayton, Ohio.
Holden, Harlan W.	Air-Pit.	1st Lt.	OCAS Washington, D. C.
Holland, Harvey H.	Ball-Obs.	1st Lt.	Langley Fld., Hampton, Va.
Holland, Park	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Holmberg, John B.	Air-Pit.	Capt.	Kelly Fld., San Antonio, Tex.
Honsinger, Frank T.	Air-Pit.	1st Lt.	Ellington Fld., Houston, Texas.
Hopkins, Fred- erick M. Jr.	Air-Obs.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Hopkins, Hubert V.	Ball-Obs.	Capt.	A. F. in G., Coblenz, Germany.
Hoppin, Bushrod	Air-Pit.	1st Lt.	Ross Fld., Arcadia, Calif.
Horn, Charles A.	Air-Pit. (AO)	1st Lt.	Langley Fld., Hampton, Va.
Hornsby, Aubrey	Air-Obs.	1st Lt.	March Fld., Riverside, Calif.
Horton, Clarence F.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Hough, Roney B. Jr.	Air-Pit.	Capt.	Kelly Fld., San Antonio, Tex.
Hough, Walter B.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
*Houghtland, Howard J.	Air-Pit.	Capt.	San Antonio Air Intermediate Depot, Kelly Fld., San Antonio, Tex.
Houghton, Junius H.	Air-Pit.	Capt.	Manila, P. I.
			Scott Fld., Belleville, Ill.

*House, Ray M.	Capt.	Carlstrom Fld., Arcadia, Fla.	Lawson, Lawrence A.	Obs.	1st Lt.	Honolulu, H. T.
House, Edwin J.	Air-Pit.	Capt. Langley Fld., Hampton, Va.	Lawson, Walter R.	Air-Pit.	Capt.	Langley Fld., Hampton, Va.
*Howard, Dudley B.	Capt.	Ross Fld., Arcadia, Calif.	Lawton, Malcolm S.	Air-Pit.	1st Lt.	Kelly Fld. San Antonio, Tex.
Howard, Charles H.	Air-Pit.	1st Lt. San Antonio Air Intermediate Depot, Kelly Fld., San Antonio, Tex.	Lazar, Eugene	Capt.		Curtiss Elmwood Air Reserve Depot, Buffalo, N. Y.
Howard, John H.	Air-Pit.	Lt. Col. F.A. School, Ft. Sill, Okla.	Lea, Royal B.	Air-Pit.	1st Lt.	Bolling Field, Anacostia, D. C.
Howard, Clinton W.	Air-Pit.	Major Eng. Division, Dayton, Ohio. (T.D. M.I.T., Cambridge, Mass.)	Lebrun, Richard K.	Air-Pit.	1st Lt.	Kelly Fld. San Antonio, Tex.
Hoyt, Ross G.	Ball-Obs.	Capt. Honolulu, H. T.	Leonard, Charles M.	Air-Pit.	1st Lt.	Manila, P. I.
Hunnam, Richard O.	Air-Pit.	1st Lt. Kelly Fld., San Antonio, Tex.	Lewis, Burton F.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio.
Hunter, Frank O. D.	Pit. (AO)	Capt. Ellington Field, Houston, Tex.	Liebhauser, Edgar A.	Air-Pit.	1st Lt.	Ft. Bliss, Tex. 12th Sqdn.
Hurd, Leland Charles	Air-Pit.	1st Lt. Manila, P. I.	Liggett, Arthur G.	Air-Pit.	1st Lt.	Crissy Fld., Presidio of San Francisco, Calif.
Hurst, Ernest L.	Air-Pit.	1st Lt. San Antonio Air Intermediate Depot, Kelly Fld., San Antonio, Tex.	Lincoln, Rush B.	Ball-Obs.	Major	OCAS Washington, D. C.
Hutchins, Don L.	Airship-Pit. (BO)	1st Lt. Brooks Fld., San Antonio, Tex.	Lindberg, Alfred	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Hutchison, James T.	Air-Pit.	1st Lt. Selfridge Fld., Mt. Clemens, Mich.	Lindgrove, Martin S.	Air-Pit.	1st Lt.	Manila, P. I.
Hyndshaw, Silas C.	Air-Pit.	1st Lt. AGSD Morrison, Va.	Lindberg, Theodore J.	Air-Pit.	1st Lt.	Post Fld., Ft. Sill, Okla.
Hynes, Thomas V.	Air-Pit.	1st Lt. Honolulu, H. T.	Lingle, David G.	Air-Pit.	1st Lt.	Ellington Fld., Houston, Texas.
Idzorek, Stephen J.	Capt.	Long Island Air Reserve Depot, U. S. Aer. Eng. Plan, L. I. City, N. Y.	*Little, George S. V.	Ball-Obs.	1st Lt.	Capt. Kelly Fld. San Antonio, Tex.
Ignico, Robert V.	Ball-Obs.	1st Lt. Langley Fld., Hampton, Va.	Lober, Clarence B.	Air-Pit.	Major	Lee Hall, Va.
Jacobs, Lynwood B.	Air-Pit.	Capt. Langley Fld., Hampton, Va.	Lohman, Eugene A.	Air-Pit.	Major	F.A. School, Ft. Sill, Okla.
*Jett, Raymond S.	Air-Pit.	1st Lt. Carlstrom Fld., Arcadia, Fla.	Longanecker, Ira	Air-Pit.	Major	Inspector General's Office, Wash., D. C.
Jewett, Alfred L.	Air-Pit.	1st Lt. 6th C.A., 1819 West Pershing Road, Chicago, Ill.	Longfellow, Newton	Air-Pit.	1st Lt.	Manila, P. I.
Johnson, Arthur Lowell	Pit.	1st Lt. Post Fld., Ft. Sill, Okla.	Longley, Francis B.	Capt.		March Fld., Riverside, Calif.
Johnson, Bayard	Air-Pit.	1st Lt. McCook Fld., Dayton, Ohio.	Lovell, George E. Jr.	Air-Pit.	Major	Eng. Division, Dayton, Ohio.
Johnson, Cortlandt S.	Air-Pit.	1st Lt. Long Island Air Res. Depot, U.S. Aer. Engine Plant, L. I. City, N. Y.	Lundberg, George G.	Ball-Obs.	1st Lt.	Pt. Omaha, Nebr.
Johnson, Davenport	Air-Pit.	Major Langley Fld., Hampton, Va.	Lundell, Floyd A.	Air-Pit.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Johnson, Edwin	Air-Pit.	1st Lt. Manila, P. I.	Lunt, Samuel M.	Airship-Pit. (BO)	1st Lt.	Kelly Fld. San Antonio, Tex.
Johnson, Elza C.	Air-Pit.	Major OCAS Washington, D. C.	Lynch, Frederick D.	Air-Pit.	1st Lt.	Kelly Fld. San Antonio, Tex.
Johnson, Fonda B.	Air-Pit.	1st Lt. Ellington Fld., Houston, Texas.	Lynch, John E.	Air-Pit.	1st Lt.	Mitchel Fld., L. I., N. Y.
Johnson, Frederick A.	Air-Pit.	1st Lt. Langley Fld., Hampton, Va.	Lynd, William E.	Air-Pit.	1st Lt.	Capt. Post Fld., Ft. Sill, Okla.
Johnson, George P.	Air-Obs.	Capt. Kelly Fld., San Antonio, Tex.	Lyon, Alfred J.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio.
Johnson, Harry A.	Air-Pit.	1st Lt. Post Fld., Ft. Sill, Okla.	Lyon, Edwin B.	Air-Pit.	Major	1st Corps Area, Army Base, Boston 9, Mass.
Johnson, J. Thad	Air-Pit.	1st Lt. Honolulu, H. T.	*McBlain, John F.		1st Lt.	Carlstrom Fld., Arcadia, Fla.
Johnston, Douglas	Air-Obs.	Capt. Honolulu, H. T.	*McBride, Benjamin R.		1st Lt.	Ellington Fld., Houston, Texas.
Jones, Aaron E.	Air-Pit.	1st Lt. OCAS Washington, D. C.	McChord, William C.	Air-Pit.	Major	6th C.A., 1819 West Pershing Road, Chicago, Ill.
Jones, Byron Q.	Air-Pit.	Major Manila, P. I.	McClellan, Hex.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Jones, Delbert E.	Air-Pit.	1st Lt. Langley Fld., Hampton, Va.	McClelland, Harold M.	Air-Pit.	Capt.	Post Fld., Ft. Sill, Okla.
Jones, Edward D.	Air-Pit.	1st Lt. Kelly Fld., San Antonio, Tex.	McConnell, Adolphus R.	Air-Pit.	1st Lt.	Kelly Fld. San Antonio, Tex.
Jones, John H.	Air-Pit.	Capt. Selfridge Fld., Mt. Clemens, Mich.	*McCormick, Harlan T.	Ball-Obs.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Jones, Junius Wallace	Air-Pit.	Major F.A. School, Ft. Sill, Okla.	McCormick, Havnne	Ball-Obs.	1st Lt.	ABS Ross Fld., Arcadia, Calif.
Jones, Roy M.	Ball-Obs.	Major OCAS Washington, D. C.	McCoey, Wendell B.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Jones, Ulysses Grant	Air-Pit.	1st Lt. AGSD Morrison, Va.	McCulloch, John M.	Air-Pit.	1st Lt.	Rockwell Air Intermediate Depot, Rockwell Fld., San Diego, Calif.
Jordan, James Bumer	Ball-Obs.	1st Lt. Scott Fld., Belleville, Ill.	McCullogh, Roger S.	Ball-Obs.	Capt.	Post Fld., Ft. Sill, Okla.
Jouett, John H.	Airship-Pit. (BO)	Major Ft. Sill Okla.	McCune, Milo	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio.
Julian, Rupert	Air-Pit.	1st Lt. F.A. School, Ft. Sill, Okla.	*McDaniel, Arthur B.	Air-Pit.	Capt.	Kelly Fld. San Antonio, Tex.
Kane, Clarence P.	Ball-Obs.	1st Lt. Ross Fld., Arcadia, Calif.	McDarmont, Corley P.	Air-Pit.	1st Lt.	Kelly Fld. San Antonio, Tex.
Kase, John A.	Air-Pit.	1st Lt. Chapman, Fld., Miami, Fla.	McDonald, George C.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Kauch, Robert	Air-Pit.	Capt. Eng. Division, Dayton, Ohio.	McDonnell, John C.	Air-Pit.	Major	M.I.T. Cambridge, Mass.
Keesling, Lloyd N.	Air-Pit.	Capt. Manila, P. I.	McDonnell, John M.	Air-Pit.	1st Lt.	Kelly Field, San Antonio, Texas
Kehoe, Frank Jr.	Air-Pit.	1st Lt. Brooks Fld., San Antonio, Texas.	McDuffie, Jasper K.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
*Kelley, John W.	Air-Pit.	Capt. F.A. School, Ft. Sill, Okla.	McEntire, Georg W.	Airship-Pit. (BO)	Capt.	Langley Fld., Hampton, Va.
Kelly, Oakley G.	Air-Pit.	1st Lt. Eng. Division, Dayton, Ohio.	McFarland, Allan P.	Ball-Obs.	Capt.	Eng. Division, Dayton, Ohio.
Kemmer, Paul H.	Air-Pit.	1st Lt. Carlstrom Fld., Arcadia, Fla.	McGinnis, Harold A.	Air-Pit.	1st Lt.	Ellington Fld., Houston, Texas.
*Kennedy, Emile T.	Air-Pit.	1st Lt. Scott Fld., Belleville, Ill.	*McGraw, Leroy E.	Air-Pit.	1st Lt.	Ross Fld., Arcadia, Calif.
Kennedy, Frank M.	Airship-Pit. (BO)	Major Scott Fld., Belleville, Ill.	McGregor, Kenneth C.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Kennedy, John C.	Air-Pit.	1st Lt. Baltimore, Md. (Instr. Md. Nat'l Guard)	McHenry, George A.	Air-Pit.	1st Lt.	Mather Fld., Sacramento, Calif.
Kenney, Cornelius J.	Air-Pit.	1st Lt. Kelly Fld., San Antonio, Tex.	McHughey, Michael E.	Ball-Obs.	1st Lt.	Lee Hall, Va.
Kennedy, George C.	Air-Pit.	Capt. Eng. Division, Dayton, Ohio.	McIntosh, Lawrence W.	Air-Pit.	Major	Eng. Division, Dayton, Ohio
Kenny, Frederick P.	Air-Pit.	1st Lt. Fairfield Air Intermediate Depot, Fairfield, Ohio.	McKee, Frank M.	Airship-Pit.	1st Lt.	Kelly Field, San Antonio, Texas
Kenyon, Horace S. Jr.	Air-Pit.	1st Lt. OCAS Washington, D. C.	McKiernan, William J. Jr.	Air-Pit.	1st Lt.	Kelly Field, San Antonio, Texas
Kepper, William E.	Ball-Obs.	Capt. Langley Fld., Hampton, Va.	McKinley, Ashley C.	Ball-Obs.	1st Lt.	Scott Fld., Belleville, Ill.
Kiel, Emil C.	Air-Pit.	1st Lt. Crissy Fld., Presidio of San Francisco, Calif.	McKinnon, Morton H.	Air-Pit.	1st Lt.	12th Sqd. (Obs.) Airdrome, Ft. Bliss, Tex.
Kilner, Walter G.	Air-Pit.	Major OCAS Washington, D. C.	McMullen, Clements	Air-Pit.	1st Lt.	Walter Reed Hosp., Takoma Park, D. C.
Kincaid, Alvin C.	Air-Obs.	1st Lt. Montgomery Air Intermediate Depot, Montgomery, Ala.	McNarney, Joseph T.	Air-Pit.	Major	Langley Fld., Hampton, Va.
King, Alfred F. Jr.	Air-Pit.	Capt. F.A. School, Ft. Sill, Okla.	McNeil, Guy L.	Air-Pit.	1st Lt.	Montgomery Air Intermediate Depot, Montgomery, Ala.
Kinloch, Robert A.	Air-Pit.	Capt. F.A. School, Ft. Sill, Okla.	McPike, Georg V.	Air-Pit.	1st Lt.	Fairfield Air Intermediate Depot, Fairfield, Ohio.
Kirby, Maxwell	Air-Pit.	Major 5th Corps Area, Ft. Benjamin Harrison, Ind.	McReynolds, Edwin R.	Air-Pit.	1st Lt.	Kelly Field, San Antonio, Texas
Kirkpatrick, Richard J.	Air-Pit.	Capt. March Fld., Riverside, Calif.	McDill, Leslie	Air-Pit.	Major	Mass. Inst. Tech., Cambridge, Mass.
Kirkpatrick, Ross C.	Air-Pit.	1st Lt. Mitchel Fld., L. I., N. Y.	*MacDonald, George F.	Air-Pit.	Capt.	Carlstrom Fld., Arcadia, Fla.
Kirtland, Roy C.	Air-Pit.	Lt. Col. G.S.S. Ft. Leavenworth, Kansas	MacDonald, Russell C.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Kirksey, Guy	Air-Pit.	1st Lt. Bolling Fld., Anacostia, D. C.	MacIver, Clarence R.	Air-Pit.	1st Lt.	Kelly Field, San Antonio, Texas
Knapp, Robert D.	Air-Pit.	1st Lt. 12th Sqd. (Obs.) Airdrome, Ft. Bliss, Tex.	Macready, John A.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio
Knight, Louis R.	Air-Pit.	Capt. Langley Fld., Hampton, Va.	Mabry, Dale	Airship-Pit. (BO)	Capt.	Langley Fld., Hampton, Va.
Koenig, Ira R.	Ball-Obs.	1st Lt. ABS Lee Hall, Va.	Madarasz, Jesse A.	Air-Pit.	1st Lt.	Mather Fld., Sacramento, Calif.
Koontz, Theodore J.	Air-Pit.	1st Lt. Kelly Fld., San Antonio, Tex.	Magee, Richard H.	Air-Pit.	1st Lt.	Rich Fld., Waco, Texas.
Koontz, Leonidas L.	Air-Pit.	1st Lt. Kelly Fld., San Antonio, Tex. (Temp. duty Yale Univ., New Haven, Conn.)	Maitland, Lester J.	Air-Pit.	1st Lt.	Bolling Fld. Anacostia, D. C.
Kraus, Walter F.	Air-Pit.	Capt. F.A. School, Ft. Sill, Okla.	Mallory, Louis C.	Air-Pit.	1st Lt.	Godman Field, West Point, Ky.
Krogstad, Arnold N.	Air-Pit.	Major 2nd Corps Area, Governors Island, N. Y.	Mann, Merrill D. Jr.	Air-Pit.	1st Lt.	Fairfield Air Intermediate Depot, Fairfield, O.
Kunkel, Henry William	Pit.	1st Lt. ASMS Chanute Fld., Rantoul, Ill.	Manzelman, Earle H.	Air-Pit.	1st Lt.	Honolulu, H. T.
Kuntz, Clyde A.	Ball-Obs.	1st Lt. Lee Hall, Va.	Marriner, Alfred W.	Air-Pit.	1st Lt.	Honolulu, H. T.
Lackland, Frank D.	Air-Pit.	Major 8th Corps Area, Ft. Sam Houston, Tex.	Mars, James A.	Ball-Obs.	Major	Office Asst. Secretary War, Wash., D. C.
Ladd, Arthur K.	Air-Obs.	1st Lt. Ellington Fld., Houston, Texas.	Martenstein, Austin W.	Air-Pit.	1st Lt.	Richmond Air Intermediate Depot, Richmond, Va.
*Lafferty, Frederick R.	Air-Pit.	Capt. Manila, P. I.	Martin, Bruce N.	Airship-Pit. (BO)	1st Lt.	Ross Fld., Arcadia, Calif.
Lahm, Frank P.	Air-Pit.	Lt. Col. War Plans Div., General Staff.	Martin, Frederick L.	Air-Pit.	Major	ASMS Chanute Fld., Rantoul, Ill.
Laird, John A. Jr.	Air-Pit.	1st Lt. Kelly Fld., San Antonio, Tex.	Martin, Harold S.	Air-Pit.	Major	Eng. Division, Dayton, Ohio
Lanagan, William M.	Air-Pit.	1st Lt. AGSD Morrison, Va.	Martin, Harry J.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Landers, Sigmund F.	Air-Pit.	1st Lt. Kelly Fld. San Antonio, Tex.	Mathias, Paul Jones	Air-Obs.	Capt.	Park Fld., Millington, Tenn.
Langmead Edmund C.	Air-Pit.	1st Lt. Langley Fld., Hampton, Va.	Martin, Pardoe	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Langphier, Thomas G.	Air-Pit.	Major Post Fld., Ft. Sill, Okla.	Matthews, Thomas K.	Air-Pit.	1st Lt.	Ellington Fld., Houston, Texas.
Larson, Westside T.	Air-Pit.	1st Lt. Kelly Fld. San Antonio, Tex.	Maughan, Russell L.	Air-Pit.	1st Lt.	Mather Fld., Sacramento, Calif.
*Lathrop, Elbe A.	Air-Pit.	Major G.S.S. Ft. Leavenworth, Kansas	Maxwell, Warren A.	Air-Pit.	1st Lt.	Crissy Fld., Presidio of San Francisco, Calif.
Laughinghouse, Newman R.	Air-Pit.	1st Lt. March Fld., Riverside, Calif.	Mayer, William B.	Ball-Obs.	Capt.	Ross Fld., Arcadia, Calif.
Laughlin, Edward	Air-Pit.	Capt. San Antonio Air Intermediate Depot, San Antonio, Tex.	Mavnard, William R.	Air-Obs.	Capt.	Dorr Fld., Arcadia, Fla.
	Ball-Obs.		Melanson, Arthur J.	Air-Pit.	1st Lt.	Montgomery Air Intermediate Depot, Montgomery, Ala.
			Melin, Charles R.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
			Meloy, Vincent J.	Air-Pit.	1st Lt.	Kelly Field, San Antonio, Texas
			Melville, Phillips	Air-Pit.	1st Lt.	Aberdeen Proving Grd., Aberdeen, Md.
			Meredith, Russell L.	Air-Pit.	Capt.	Eng. Division, Dayton, Ohio
			Meyer, Walter T.	Air-Pit.	1st Lt.	Kelly Field, San Antonio, Texas

Meyers, Bennett E.	Air-Plt.	1st Lt.	Curtiss Elmwood Air Reserve Depot, Buffalo, N. Y.
Midcap, Clarence L.	Air-Plt.	Capt.	Manila, P. I.
Miller, Henry J. F.	Air-Plt.	Major	Kelly Field, San Antonio, Texas
Miller, Leland W.	Air-Plt.	1st Lt.	Langley Fld., Hampton, Va.
Miller, Lester T.	Ball-Obs.	Capt.	Ross Fld., Arcadia, Calif.
Miller, Walter	Air-Plt.	1st Lt.	Honolulu, H. T.
Milling, Thomas DeW.	Air-Plt.	Major	Langley Fld., Hampton, Va.
Mills, Charles H.	Air-Plt.	1st Lt.	OCAS Washington, D. C.
Mills, Harry H.	Air-Plt.	1st Lt.	Post Fld., Ft. Sill, Okla.
Mills, Samuel P.	Air-Plt.	1st Lt.	Eng. Division, Dayton, Ohio
Milyard, Raymond C.	Air-Plt.	1st Lt.	12 Sqdn. (Obs.) Airdrome, Ft. Bliss, Tex.
Miner, Valentine S.	Air-Plt.	1st Lt.	Langley Fld., Hampton, Va.
Minter, Hugh C.	Air-Plt.	1st Lt.	Mather Fld., Sacramento, Calif.
Mitchell, William	MA Brig-Gen.		OCAS Washington, D. C.
Moffat, Reuben C.	Air-Plt.	1st Lt.	1st Corps Area, Boston, Mass.
Mollison, James A.	Air-Plt.	1st Lt.	Kelly Field, San Antonio, Texas
Monahan, John W.	Air-Plt.	1st Lt.	Mitchel Fld., L. I., N. Y.
Monteith, Charles N.	Air-Plt.	1st Lt.	Eng. Division, Dayton, Ohio
†Montfort, Louis B.	Ball-Obs.	Capt.	OCAS Washington, D. C.
Montgomery, Harry G.	Air-Plt.	1st Lt.	Ross Fld., Arcadia, Calif.
Monthan, Oscar	Air-Plt.	1st Lt.	Eng. Division, Dayton, Ohio
Moore, Ernest S.	Air-Plt.	1st Lt.	Langley Fld., Hampton, Va.
Moore, Odas	Air-Plt.	1st Lt.	France Fld., Cristobal, C. Z.
Mooney, Horace W.	Ball-Obs.	Capt.	Ross Fld., Arcadia, Calif.
Moor, Robert Dudley	Air-Plt.	1st Lt.	Kelly Field, San Antonio, Texas
Moore, Harold A.	Air-Plt.	1st Lt.	March Fld., Riverside, Calif.
Moore, John I.	Air-Plt.	Capt.	Manila, P. I.
Moore, William G.	Air-Plt.	1st Lt.	Miller Fld., New Dorp, S. I., N. Y.
Moorman, Ivan G.	Air-Plt.	1st Lt.	San Antonio Air Intermediate Depot, Kelly Fld., San Antonio, Texas
Moose, William L. Jr.	Air-Plt.	Major	Richmond Air Intermediate Depot, Richmond, Va.
Moran, William King	Air-Plt.	1st Lt.	Montgomery Air Intermediate Depot, Montgomery, Ala.
Morgan, John Ross	Air-Plt.	1st Lt.	Mather Fld., Sacramento, Calif.
Moriarty, Louis P.	Air-Plt.	1st Lt.	Eng. Division, Dayton, Ohio
Morris, Edward M.	Air-Plt.	1st Lt.	Langley Fld., Hampton, Va.
Morris, Joseph T.	Air-Plt.	1st Lt.	Post Fld., Ft. Sill, Okla.
Morris, William C.	Air-Plt.	1st Lt.	Ellington Fld., Houston, Texas
Morrison, Raymond	Air-Plt.	1st Lt.	March Fld., Riverside, Calif.
Morse, Charles L.	Air-Plt.	1st Lt.	Eng. Division, Dayton, Ohio
Morton, Benjamin R.	Air-Plt.	1st Lt.	OCAS Washington, D. C.
Moseley, Corliss C.	Air-Plt.	1st Lt.	Eng. Division, Dayton, Ohio
Moehar, Roy B.	Air-Plt.	1st Lt.	Ellington Fld., Houston, Texas
Motley, Langhorne W.	Air-Plt.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Moyer, Max Frederick	Plt (BO)	1st Lt.	Aberdeen Proving Grounds, Aberdeen, Md.
Muhlenberg, Henry C. K.	Plt.	Major	Seattle, Washington, Univ. of Washington
Murphy, William Herbert	Capt.		A. F. in G., Coblenz, Germany.
Muse, Donald P.	Air-Plt.	Capt.	Eng. Division, Dayton, Ohio
Myers, Carl H.	Air-Plt.	1st Lt.	Kelly Field, San Antonio, Texas
Myers, Devereux M.	Air-Plt.	1st Lt.	Langley Fld., Hampton, Va.
Naiden, Earl L.	Air-Plt.	Major	G.S.S. Ft. Leavenworth, Kans.
Neely, James T.	Ball-Obs.	1st Lt.	Ross Fld., Arcadia, Calif.
Nelson, Erik H.	Air-Plt.	1st Lt.	Eng. Division, Dayton, Ohio
Nelson, Fred C.	Air-Plt.	1st Lt.	Post Fld., Ft. Sill, Okla.
Netherwood, Douglas B.	Plt.	Major	Americus Air Intermediate Depot, Americus, Ga.
Niedermeyer, Frederick W. Jr.	Air-Plt.	1st Lt.	Eng. Division, Dayton, Ohio
Niergarth, Omer O.	Air-Plt.	1st Lt.	OCAS Washington, D. C.
Norby, Erling S.	Air-Plt.	1st Lt.	March Fld., Riverside, Calif.
Norris, Howard D.	Air-Plt.	1st Lt.	Mitchel Fld., L. I., N. Y.
Norwood, Donald W.	2nd Lt.		Ellington Fld., Houston, Texas
Nowland, Bob E.	Air-Plt.	1st Lt.	Godman Field, West Point, Ky.
Nutt, Clifford C.	Air-Plt.	1st Lt.	Langley Fld., Hampton, Va.
Ocker, William C.	Air-Plt.	Capt.	Bolling Fld., Anacostia, D. C.
O'Connell, Jack Joseph	Air-Plt.	1st Lt.	Kelly Fld., San Antonio, Tex.
O'Hanley, Robert E.	Air-Plt.	1st Lt.	Godman Field, West Point, Ky.
Oldfield, Charles B.	Air-Plt.	Capt.	F.A. School, Ft. Sill, Okla.
Oldys, Robert	Air-Plt.	Capt.	Honolulu, H. T.
Olmsted, Robert S.	Ball-Obs.	1st Lt.	Langley Fld., Hampton, Va.
O'Neil, Raymond E.	Ball-Obs.	Capt.	Ross Fld., Arcadia, Calif.
Ott, Roderick N.	Air-Plt.	1st Lt.	Eng. Div., Dayton, Ohio
Owens, Ray L.	Air-Plt.	1st Lt.	F.A. School, Ft. Sill Okla.
*Packard, Harold A.	1st Lt.		Carlstrom Fld., Arcadia, Fla.
Paegelow, John A.	Airship-Plt. (BO)	Major	Brooks Fld., San Antonio, Tex.
Page, Edwin R.	1st Lt.		OCAS Washington, D. C.
Palmer, George M.	Air-Plt.	1st Lt.	Manila, P. I.
Pardy, George W.	Air-Plt.	1st Lt.	F.A. School, Ft. Sill Okla.
*Parker, James E.	Air-Plt.	Capt.	Langley Fld., Hampton, Va.
*Parks, Victor Jr.	Ball-Obs.	1st Lt.	Aberdeen Prov. Ground, Aberdeen, Md.
Parris, George F.	1st Lt.		
Pascale, Henry	Air-Plt.	Capt.	Eng. Div., Dayton, Ohio
Patrick, Frederick I.	Air-Plt.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Patrick, John B.	Air-Plt.	1st Lt.	Manila, P. I.
*Patrick, Mason M.	Maj. Gen.		OCAS Washington, D. C.
Patterson, Geo. B.	Air-Plt.	Capt.	Eng. Div., Dayton, Ohio
Paul, Frank M.	Air-Plt.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Peabody, George H.	Air-Pilot	Major	March Fld., Riverside, Calif.
Peak, Lawrence I.	Air-Plt.	1st Lt.	A. F. in G., Coblenz, Germany
Pearson, Alexander Jr.	Air-Plt.	1st Lt.	12th Sqdn. (Obs.) Airdrome, Ft. Bliss, Texas
†Pearson, Wm. F.	Ball-Obs.	Major	OCAS Washington, D. C.
*Peck, Walter R.	1st Lt.		Carlstrom Fld., Arcadia, Fla.
Peek, Norman W.	Airship-Plt. (BO)	Major	ABS Lee Hall, Va.
Perrin, Elmer D.	Air-Plt.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Phillips, Charles T.	Air-Plt.	Capt.	Langley Fld., Hampton, Va.
Phillips, Donald B.	2nd Lt.		Carlstrom Fld., Arcadia, Fla.
Phillips, Wendell K.	Air-Plt.	1st Lt.	Aberdeen Prov. Grd., Aberdeen, Md.
Physioc, Joseph A. Jr.	1st Lt.		Ross Fld., Arcadia, Calif.
*Pirie, John H.	Major		Kelly Fld., San Antonio, Tex.
Pitta, Albert B.	Air-Plt.	1st Lt.	March Fld., Riverside, Calif.
Pitta, Younger A.	Air-Plt.	1st Lt.	March Fld., Riverside, Calif.
Place, Fred	Capt.		Kelly Fld., San Antonio, Tex.
Polk, George W.	Air-Plt.	1st Lt.	Eng. Div., Dayton, Ohio
Post, Leo F.	Air-Plt.	1st Lt.	Kelly Fld., San Antonio, Tex.
Powell, James F.	Ball-Obs.	1st Lt.	Ross Fld., Arcadia, Calif.
Powers, Edward M.	Air-Plt.	1st Lt.	San Antonio Air Intermediate Depot, Kelly Fld., San Antonio, Tex.
Pratt, Henry C.	Air-Plt.	Major	G.S.S. Ft. Leavenworth, Kans.
Prentiss, Paul H.	Air-Plt.	1st Lt.	Little Rock Air Intermediate Depot, Little Rock, Ark.
Prime, Charles P.	Air-Plt.	1st Lt.	Post Fld., Ft. Sill, Okla.
Pritchard, Frank H.	Air-Plt.	Capt.	F.A. School, Ft. Sill Okla.
Proctor, Ivan L.	Air-Plt.	1st Lt.	Little Rock Air Intermediate Depot, Little Rock, Ark.
Propst, Rudolph W.	1st Lt.		Long Island Air Reserve Depot, U. S. Aero Eng. Plant, L. I. City, N. Y.
Prosser, Harvey W.	Air-Plt.	1st Lt.	12th Sqdn. (Obs.) Airdrome, Ft. Bliss, Texas
Pursley, Charles A.	Air-Obs.	Capt.	Kelly Fld., San Antonio, Tex.
Purvey, Alfred I.	Ball-Obs.	1st Lt.	Ross Fld., Arcadia, Calif.
Putman, Marion G.	1st Lt.		Love Fld., Dallas, Tex.
Pyle, Carl W.	Air-Plt.	1st Lt.	Eng. Div., Dayton, Ohio
Quinn, Orlo H.	Air-Plt.	Capt.	France Fld., Cristobal, C. Z.
Rabold, Raphael F.	1st Lt.		Carlstrom Fld., Arcadia, Fla.
Rader, Ira A.	Air-Plt.	Major	7th Corps Area, Ft. Crook, Nebr.
Raley, Edward W.	Air-Plt.	1st Lt.	Kelly Fld., San Antonio, Tex.
Ralph, Edward J.	Capt.		Office Asst. Secretary of War, Washington, D. C.
Ramey, Howard K.	Air-Plt.	1st Lt.	Bolling Fld., Anacostia, D. C.
Randall, Merwyn C.	Aerial Bomber	1st Lt.	Langley Fld., Hampton, Va.
Randolph, Wm. M.	Air-Plt.	Capt.	(TID Carlstrom F.) Rockwell Air Intermediate Depot, Rockwell Fld., San Diego, Calif.
Reardan, John D.	Ball-Obs.	Major	ABS Ft. Omaha, Nebr.
Redman, Mark H.	Air-Plt.	1st Lt.	Eng. Div., Dayton, Ohio
Reed, Walter J.	Airship-Plt.	Capt.	Langley Fld., Hampton, Va.
Reese, Lewis R. P.	Air-Plt.	1st Lt.	Walter Reed Hospital, Takoma, D. C.
Reeves, Dache McC	Ball-Obs.	1st Lt.	ABS Lee Hall, Va.
Reid, Walter H.	Air-Plt.	1st Lt.	Ellington Fld., Houston, Texas
Reilly, Henry H.	Air-Plt.	1st Lt.	March Fld., Riverside, Calif.
Reinburg, Geo. E. A.	Air-Plt.	Major	OCAS Washington, D. C.
Reynolds, Clearton H.	Air-Plt.	Capt.	Langley Fld., Hampton, Va.
Reynolds, John N.	MA Major		Kelly Fld., San Antonio, Tex.
Rice, George Edgar	Air-Plt.	1st Lt.	Honolulu, H. T.
Richards, Harrison H.	C. Plt.	Major	Love Fld., Dallas, Tex.
Richards, Walter E.	Air-Plt.	1st Lt.	Eng. Div., Dayton, Ohio
Richter, J. Paul	Air-Plt.	1st Lt.	Manila, P. I.
Ridenour, Carlyle H.	Air-Plt.	1st Lt.	Eng. Div., Dayton, Ohio
Riley, Henry I.	Air-Plt.	1st Lt.	Manila, P. I.
Riley, William E.	Ball-Obs.	1st Lt.	Aberdeen Prov. Grounds, Aberdeen, Md.
Rivers, Harold R.	Air-Plt.	1st Lt.	Langley Fld., Hampton, Va.
Robbins, Edward M.	1st Lt.		Kelly Fld., San Antonio, Tex.
Robbins, Oliver K.	Air-Plt.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Roberson, George O.	Air-Plt.	1st Lt.	Ellington Fld., Houston, Texas
*Robertson, John D.	1st Lt.		Carlstrom Fld., Arcadia, Fla.
Robertson, William A.	Air-Plt.	Major	Univ. of Calif, Berkeley, Calif.
Robillard, Robert E.	2nd Lt.		Carlstrom Fld., Arcadia, Fla.
Robins, Augustine W.	Air-Plt.	Major	Fairfield Air Intermediate Depot, Fairfield, Ohio
Robinson, Charles McK	Air-Pla.	1st Lt.	5th Corps Area, Ft. Benjamin Harrison, Ind.
Robinson, Ward F.	Air-Plt.	1st Lt.	Montgomery Air Intermediate Depot, Montgomery, Ala.
Rogers, Oscar L.	Air-Plt.	1st Lt.	March Fld., Riverside, Calif.
Roullot, John P.	Air-Plt.	1st Lt.	Mitchel Fld., L. I., N. Y.
Rouse, Harold F.	Air-Plt.	1st Lt.	Langley Fld., Hampton, Va.
Rowlard, Dudley E.	Air-Plt.	1st Lt.	Mitchel Fld., L. I., N. Y.
Royce, Ralph	Air-Plt.	Major	Carlstrom Fld., Arcadia, Fla.
Rudolph, Jacob H.	Air-Plt.	Major	Post Fld., Ft. Sill, Okla.
Ruggles, Francis W.	Air-Plt.	1st Lt.	F.A. School, Ft. Sill Okla.
Russel, Edwin A.	Air-Plt.	1st Lt.	Walter Reed Gen. Hosp., Takoma Park, D. C.
Russell, Clinton W.	Air-Plt.	Major	College Station, Tex. Agricultural & Mech. College.
Rust, Charles E.	Air-Plt.	Capt.	Carlstrom Fld., Arcadia, Fla.
St. John, Graham M.	Air-Plt.	1st Lt.	Park Fld., Millington, Tex.
Salisbury, Glenn C.	Air-Plt.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Savage, Charles M.	Ball-Obs.	Capt.	Ross Fld., Arcadia, Calif.
Scanlon, Martin F.	Air-Plt.	Major	Bolling Fld., Anacostia, D. C.
*Schabacker, Clarence H.	1st Lt.		Carlstrom Fld., Arcadia, Fla.
Schneeberger, Philip	Ball-Obs.	1st Lt.	Eng. Div., Dayton, Ohio
Schneider, Max F.	Air-Plt.	1st Lt.	Kelly Fld., San Antonio, Tex.
Schofield, Earl S.	Ball-Obs.	Capt.	Ross Fld., Arcadia, Calif.
Schramm, Ned	Air-Plt.	1st Lt.	Mather Fld., Sacramento, Calif.
Schulze, LaClair D.	Plt. (AO)	1st Lt.	Post Fld., Ft. Sill, Okla.
Searl, Edward L., Jr.	Air-Plt.	1st Lt.	Rockwell Air Intermediate Depot, Rockwell Fld., Coronado, Calif.
Seaton, David S.	Air-Plt.	Capt.	OCAS Washington, D. C.
Seifert, Frank W.	Air-Plt.	1st Lt.	Rockwell Air Intermediate Depot, Rockwell Fld., Coronado, Calif.
Sell, Robert E.	Air-Plt.	1st Lt.	Crissey Fld., San Francisco, Calif.
Selzer, Edgar T.	Air-Plt.	1st Lt.	Kelly Fld., San Antonio, Tex.
Sessions, Henry F.	Air-Plt.	1st Lt.	Kelly Fld., San Antonio, Tex.
Shangraw, Clayton C.	1st Lt.		Carlstrom Fld., Arcadia, Fla.
Shankle, Clarence E.	Air-Plt.	1st Lt.	Aberdeen Prov. Ground, Aberdeen, Md.
Sharon, Leon E.	Air-Plt.	1st Lt.	Kelly Fld., San Antonio, Tex.
*Shea, Thomas H. Jr.	Capt.		Kelly Fld., San Antonio, Tex.
Sheridan, Hiram W. Jr.	Air-Plt.	1st Lt.	Ellington Fld., Houston, Tex.
*Sherman, Raymond G.	Capt.		Carlstrom Fld., Arcadia, Fla.
Sherman, William C.	Air-Plt.	Major	Langley Fld., Hampton, Va.
*Shirley, Byron E.	1st Lt.		Carlstrom Fld., Arcadia, Fla.
Shively, James Cole	Ball-Obs.	1st Lt.	Ross Fld., Arcadia, Calif.
Shoptaw, John W.	Airship-Plt.	1st Lt.	Ross Fld., Arcadia, Calif.
Shovlin, Hubert A.	Air-Plt.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
*Shrader, Edwin G.	1st Lt.		Carlstrom Fld., Arcadia, Fla.
Shumaker, Floyd N.	Air-Plt.	Capt.	F.A. School, Ft. Sill Okla.
*Signer, John W.	Air-Plt. (AO)	Capt.	F.A. School, Ft. Sill Okla.
Simon, Louis C. Jr.	Air-Plt.	1st Lt.	Montgomery Air Intermediate Depot, Montgomery, Ala.
Simonin, Arthur E.	Air-Plt.	Capt.	Mitchel Fld., L. I., N. Y.
Simons, John W. Jr.	Air-Plt.	Major	OCAS Washington, D. C.

*Sinclair, William C.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Skansse, Peter E.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
*Skeel, Burton E.	Capt.		Ellington Fld., Houston, Tex.
Skemp, Samuel C.	Air-Pit.	Capt.	F.A. School, Ft. Sill Okla.
Skow, Charles T.	Air-Pit.	1st Lt.	Montgomery Air Intermediate De-
Slaterry, John W.	Air-Pit.	1st Lt.	pot, Montgomery, Ala.
Sloan, Kellogg	Air-Pit.	1st Lt.	Mather Fld., Sacramento, Calif.
Smith, Albert D.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio.
Smith, Harold D.	Air-Pit.	Capt.	Mather Fld., Sacramento, Calif.
Smith, Harry M.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Smith, Junius A.	Air-Pit.	Capt.	Mitchel Fld., L. I., N. Y.
Smith, Letha A.	Ball-Obs.	1st Lt.	Aberdeen Prov. Grds., Aberdeen,
Smith, Lowell H.	Air-Pit.	1st Lt.	Mid.
Smith, Stanley	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Smith, Stanton T.	Air-Pit.	Capt.	Crissey Fld., Presidio of San Fran-
Smith, Talcott P.	Air-Pit.	1st Lt.	cisco, Calif.
Smith, Wallace G.	Air-Pit.	1st Lt.	Post Fld., Ft. Sill, Okla.
Smythe, Clifford E.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Sneed, Albert L.	Air-Pit.	1st Lt.	Bolling Fld., Anacostia, D. C.
*Snell, Ivan B.	Ball-Obs.	1st Lt.	Langley Fld., Hampton, Va.
Snow, George W.	Ball-Obs.	1st Lt.	Langley Fld., Hampton, Va.
Snow, Lorenzo L.	Ball-Obs.	1st Lt.	3rd Corps Area, Ft. Howard, Md.
Sorenson, Edgar P.	Ball-Obs.	1st Lt.	Ross Fld., Arcadia, Calif.
Souza, William B.	Ball-Obs.	1st Lt.	March Fld., Riverside, Calif.
Spatz, Carl	MA		McCook Fld., Dayton, Ohio
Spruance, Owen E.	Air-Pit.	1st Lt.	OCAS Washington, D. C.
*Stace, Donald F.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
*Stackhouse, Robert H. V.	Air-Pit.	1st Lt.	Ellington Fld., Houston, Texas
Steinmetz, Charles W.	Air-Pit.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Stenseth, Martinus	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Stephens, Orville L.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Stevens, Albert W.	Air-Pit.	1st Lt.	Fairfield Air Intermediate Depot,
Stewart, Malcolm N.	Air-Pit.	1st Lt.	Fairfield, Ohio.
Stinson, David R.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Stitt, Donald G.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Stone, Laurence F.	Ball-Obs.	1st Lt.	Eng. Division, Dayton, Ohio.
Stoner, Rex K.	Air-Pit.	1st Lt.	Fairfield Air Intermediate Depot,
Strahm, Victor H.	Air-Pit.	1st Lt.	Fairfield, Ohio.
Stratemyer, George E.	Air-Pit.	1st Lt.	Mitchel Fld., L. I., N. Y.
Strauss, Harold A.	Air-Pit.	1st Lt.	Post Fld., Ft. Sill, Okla.
Streett, St. Clair	Air-Pit.	1st Lt.	Ross Fld., Arcadia, Calif.
*Strickland, Aubrey C.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Stromme, Joseph L.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Studler, Rene R.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Sturcken, Harold E.	Air-Pit.	1st Lt.	Honolulu, H. T.
Styles, Cassius H.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Sullivan, Charles W.	Air-Pit.	1st Lt.	Bolling Fld., Anacostia, D. C.
Sullivan, Edwin	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Sullivan, Joseph I.	Ball-Obs.	1st Lt.	OCAS Washington, D. C.
Sullivan, William S.	Air-Pit.	1st Lt.	Aberdeen Prov. Grounds, Aberdeen,
Summers, James D.	Air-Pit.	1st Lt.	Md. (TD, OCAS)
Summersett, James A. Jr.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Sutton, Harry A.	Air-Pit.	1st Lt.	F.A. School, Ft. Sill Okla.
Sweeley, William R.	Air-Pit.	1st Lt.	12th Sqd. (Obs.), Airdrome, Ft.
Talbot, Clarence P.	Air-Pit.	1st Lt.	Bliss, Tex.
Taylor, James G.	Air-Pit.	1st Lt.	Ellington Fld., Houston, Texas
Taylor, Willis R.	Air-Pit.	1st Lt.	Ross Fld., Arcadia, Calif.
Temple, John P.	Air-Pit.	1st Lt.	Mather Fld., Sacramento, Calif.
Thomas, Arthur	Ball-Obs.	1st Lt.	Ellington Fld., Houston, Texas
Thomas, Charles E. Jr.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Thompson, Bernard S.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio.
Thompson, Richard E.	Obs.	1st Lt.	Manila, P. I.
Thornell, John G.	Airship-		
Thornton, Arthur L.	Pit (BO)	Major	Langley Fld., Hampton, Va.
Tillinghast, Theose E.	Air-Pit.	1st Lt.	Post Fld., Ft. Sill, Okla.
Tinker, Clarence L.	Air-Pit.	Capt.	Eng. Division, Dayton, Ohio.
Tinsley, George C.	Air-Pit.	Major	Post Fld., Fort Sill, Okla.
*Tips, Julius C. Jr.	Capt.		Ellington Fld., Houston, Texas
Tonkin, Earl H.	Air-Pit.	1st Lt.	AGSD Houston, Tex.
Toohar, Bernard J.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Torney, Stewart W.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Tourtellot, George P.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Trunk, Otto G.	Air-Obs.	Capt.	Ellington Fld., Houston, Texas
Tucker, Morris L.	Air-Pit.	1st Lt.	Montgomery Air Intermediate De-
Turnbull, William	Ball-Obs.	1st Lt.	pot, Montgomery, Ala.
Turpin, Paul R.	Air-Pit.	1st Lt.	Fairfield Air Intermediate Depot,
Tyndall, Frank B.	Air-Pit.	1st Lt.	Fairfield, Ohio.
Umstead, Stanley M.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Upston, John E.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio.
Usher, George L.	Air-Obs.	Capt.	Langley Fld., Hampton, Va.
Valentine, Francis B.	Air-Pit.	1st Lt.	Brooks Fld., San Antonio, Tex.
Vanaman, Arthur W.	Air-Pit.	1st Lt.	Fairfield Air Intermediate Depot,
Van Meter, Solomon L.	Air-Pit.	1st Lt.	Fairfield, Ohio.
Van Nostrand, Percy E.	Ball-		Eng. Division, Dayton, Ohio.
Van Veghten, Theodore S.	Obs.	Major	
Van Zandt, John P.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Vaughn, Raymond E.	Air-Obs.	Capt.	Montgomery Air Intermediate De-
*Vautsmeier, Walter W.	Air-Pit.	1st Lt.	pot, Montgomery, Ala.
*Vidal, Eugene L.	Air-Pit.	1st Lt.	Fairfield Air Intermediate Depot,
Voland, William F.	Air-Pit.	1st Lt.	Fairfield, Ohio.
Voss, Thomas S.	Air-Pit.	1st Lt.	Eng. Division, Dayton, Ohio.
Wade, Leigh	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Wade, Willard S.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Wagner, Paul T.	Air-Pit.	1st Lt.	Post Fld., Ft. Sill, Okla.
Wainer, Perry	Air-Pit.	1st Lt.	France Fld., Cristobal, C. Z.
Walker, Kenneth N.	Air-Pit.	1st Lt.	Post Fld., Ft. Sill, Okla.
Walker, Ralph B.	Air-Pit.	1st Lt.	F.A. School, Ft. Sill, Okla.
Waller, Alfred E.	Air-Pit.	1st Lt.	Mather Fld., Sacramento, Calif.
Walsh, Raycroft	Air-Pit.	Major	France Fld., Cristobal, C. Z.
Walsh, Robert L.	Air-Pit.	Major	Eng. Division, Dayton, Ohio.
Walthall, Leroy Allen	Air-Pit.	1st Lt.	Pope Fld., Fayetteville, N. C.
Walton, Leo A.	Air-Pit.	Major	OCAS Washington, D. C.
Warren, George S.	Ball-Obs.	Capt.	Ross Fld., Arcadia, Calif.
Wash, Carlyle H.	Air-Pit.	Major	Eng. Division, Dayton, Ohio.
Watson, Arthur G.	Air-Pit.	1st Lt.	F.A. School, Ft. Sill, Okla.
Watson, Dayton D.	Air-Pit.	1st Lt.	France Fld., Cristobal, C. Z.
Watson, Henry L.	Air-Pit.	Major	Eng. Division, Dayton, Ohio.
*Watts, George D.	Ball-Obs.	Capt.	Langley Fld., Hampton, Va.
*Way, Clyde C.	Air-Pit.	Capt.	F.A. School, Ft. Sill, Okla.
Weaver, Walter R.	Air-Pit.	Major	OCAS Washington, D. C.
Webber, Charles L.	Air-Pit.	1st Lt.	Manila, P. I.
Webster, Lewis S.	Air-Pit.	1st Lt.	Langley Field, Hampton, Va.
Webster, Robert M.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Weddington, Harry	Air-Pit.	1st Lt.	ASMS Chanute Fld., Rantoul, Ill.
Weddington, Leonard D.	Pit.	1st Lt.	Honolulu, H. T.
Weeks, Harold Eastman	Obs.	Capt.	Langley Field, Hampton, Va.
Wehle, Paul G.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Weir, Benjamin G.	Air-Pit.	Major	Little Rock Air Intermediate De-
Welch, Clarence H.	Ball-Obs.	1st Lt.	pot, Little Aock, Ark.
Wells, Harold Ralph	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Welsh, William W.	Air-Pit.	1st Lt.	Scott Fld., Belleville, Ill.
Westover, Oscar	Ball-Obs.	Major	Carlstrom Fld., Arcadia, Fla.
Wheeler, Chilion F.	Air-Pit.	Capt.	OCAS Washington, D. C.
*Wheeler, John R.	Air-Pit.	Capt.	Eng. Division, Dayton, Ohio
*Wheeler, William D.	Ball-Obs.	Capt.	OCAS Washington, D. C.
*White, Frank E.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
White, Henry C.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
White, Wm. Joseph	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Whitehead, Ennis C.	Air-Pit.	1st Lt.	Ross Fld., Arcadia, Calif.
Whiteley, John F.	Air-Pit.	1st Lt.	Ellington Fld., Houston, Texas
Whitesides, John G.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Whitney, Courtney	Air-Pit.	1st Lt.	University of Ill., Urbana, Ill.
Whitten, Lyman P.	Air-Pit.	2nd Lt.	Bolling Fld., Anacostia, D. C.
Wieners, Fred B.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
*Wightman, LeRoy M.	Air-Pit.	1st Lt.	March Fld., Riverside, Calif.
Wilkins, Paul C.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Williams, Isaac J.	Air-Pit.	1st Lt.	Bolling Fld., Anacostia, D. C. (To
Williams, John G.	Air-Pit.	1st Lt.	sail for Hawaii Dec. 6, 1921)
Williams, John H. C.	Air-Pit.	1st Lt.	Post Fld., Fort Sill, Okla.
Williams, Paul L.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Williams, Walter D.	Ball-Obs.	1st Lt.	F.A. School, Ft. Sill, Okla.
*Williamson, Russell L.	Air-Pit.	1st Lt.	Mather Fld., Sacramento, Calif.
*Willis, Ellis DeV.	Air-Pit.	1st Lt.	Ross Fld., Arcadia, Calif.
Wilson, Clarence C.	Air-Pit.	1st Lt.	Carlstrom Fld., Arcadia, Fla.
Wilson, Donald	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Wilson, John H.	Air-Obs.	1st Lt.	Carlstrom Fld., San Antonio, Tex.
Wilson, Joseph A.	Air-Pit.	1st Lt.	Post Fld., Fort Sill, Okla.
Wimsatt, Robert W. C.	2nd Lt.		Post Fld., Fort Sill, Okla.
*Wishart, Harry C.	1st Lt.		Ellington Fld., Houston, Texas
*Wittman, Roland W.	Ball-Obs.	Capt.	San Antonio Air Intermediate De-
Wolfe, Kenneth Bonner	Air-Pit.	1st Lt.	pot, Kelly Fld., San Antonio, Tex.
Wolfe, Leroy M.	Air-Pit.	1st Lt.	Philippine Dept., Manila, P. I.
Wood, Edward H.	Air-Pit.	1st Lt.	Langley Fld., Hampton, Va.
Wood, Myron R.	Air-Pit.	1st Lt.	Kelly Fld., San Antonio, Tex.
Wood, Norman, R.	Air-Pit.	1st Lt.	Carlstrom Fld., Hampton, Va.
Woodard, Jacob M.	Air-Pit.	1st Lt.	Aerial-
Woodruff, James A.	Air-Pit.	1st Lt.	Bomber
Woodward, Fred Evan	Air-Pit.	1st Lt.	Woodward, Henry G.
Woodward, Henry G.	Air-Pit.	1st Lt.	Woodward, Mark R.
Woodward, Mark R.	Air-Pit.	1st Lt.	Woodbridge, Henry E.
Woodridge, Henry E.	Air-Pit.	1st Lt.	Woolsey, Clinton F.
Woolsey, Clinton F.	Air-Pit.	1st Lt.	Wooten, Ralph H.
Wooten, Ralph H.	Air-Pit.	1st Lt.	Worthington, Robert S.
Worthington, Robert S.	Air-Pit.	1st Lt.	Wright, Burdette S.
Wright, Burdette S.	Pit. (AO)	Capt.	Wright, Frank W.
Wright, Frank W.	Air-Pit.	Capt.	Wright, William B. Jr.
Wright, William B. Jr.	Air-Pit.	Capt.	Wriston, Roscoe C.
Wriston, Roscoe C.	Air-Pit.	1st Lt.	Wuest, Jacob W. S.
Wuest, Jacob W. S.	Ball-Obs.	Major	Wyatt, John A.
Wyatt, John A.	Air-Pit.	1st Lt.	Wynne, Walter W.
Wynne, Walter W.	Major		Yeager, Hobart R.
Yeager, Hobart R.	Air-Pit.	1st Lt.	York, John Y. Jr.
York, John Y. Jr.	Air-Pit.	1st Lt.	Young, Harry H.
Young, Harry H.	Air-Obs.	Capt.	Yount, Barton K.
Yount, Barton K.	Air-Pit.	Major	Zane, Robert T.
Zane, Robert T.	Air-Pit.	1st Lt.	Zellner, Wesley A.
Zellner, Wesley A.	Air-Pit.	1st Lt.	

Undergoing Physical Reconstruction

Connolly, Frederick W.	RMA	2nd Lt.	Walter Reed Gen. Hosp., Takoma, D. C.
Garnett, Joseph H.	RMA	2nd Lt.	Walter Reed Gen. Hosp., Takoma, D. C.
Howley, William T.	RMA	2nd Lt.	Walter Reed Gen. Hosp., Takoma, D. C.
Kendall, Herbert R.	RMA	2nd Lt.	Letterman Gen. Hosp., San Francisco, Calif.
Kokjer, Thomas E.	Air-Pit.	2nd Lt.	Walter Reed Gen. Hosp., Takoma, D. C.
Mooney, Raymond		1st Lt.	Walter Reed Gen. Hosp., Takoma, D. C.
Oakes, Gail C.	RMA	2nd Lt.	Walter Reed Gen. Hosp., Takoma, D. C.
O'Toole, James A.	BO	2nd Lt.	Walter Reed Gen. Hosp., Takoma, D. C.
Redfield, John J.	Aer-Bomber	1st Lt.	Walter Reed Gen. Hosp., Takoma, D. C.

Names and Addresses of Officers of Medical Dept. on Duty at Air Service Stations

Flight Surgeons

Ballantyne, Lowyd W.	Capt., M.C.	France Field, Cristobal, C. Z.
Bauer, Louis H.	Maj., M.C.	M.R.L. Mitchel Field, L. I., N. Y.
Bedinger, David W.	Air-Plt. 1st Lt.	Philippine Islands
Beeson, John P.	Capt., M.C.	March Fld., Riverside, Calif.
Beverley, Edward P.	Maj., M.C.	Langley Fld., Hampton, Va.
Brallsford, Alex. M.	Maj., M.C.	Kelly Fld., San Antonio, Tex.
Brown, Samuel E.	Capt., M.C.	Kelly Fld., San Antonio, Tex.
Buckner, Charles T. C.	Capt., M.C.	Post Fld., Ft. Sill, Okla.
Collins, Tate B.	Capt., M.C.	Carlstrom Fld., Arcadia, Fla.
Dibble, John	Maj., M.C.	Weissensturm, Germany.
Doust, Horace T.	Capt., M.C.	M.R.L. Mitchel Fld., L. I., N. Y.
Field, Louis M.	Capt., M.C.	Mather Fld., Sacramento, Calif.
Harding, Read B.	Capt., M.C.	Langley Fld., Hampton, Va.
Healy, Michael G.	1st Lt., M.C.	Luke Field, Honolulu, H. T.
Hickman, John S.	Capt., M.C.	Chanute Fld., Rantoul, Ill.
Johnson, Levy S.	Capt., M.C.	Luke Fld., Honolulu, H. T.
Longacre, Raymond F.	Maj., M.C.	M.R.L. Mitchel Fld., L. I., N. Y.
Ludwick, Arthur L.	Maj., M.C.	Army Balloon School, Ft. Omaha, Nebr.
Milean, Jr., Alex.	Air-Plt. Capt., M.C.	F.A. School, Ft. Sill, Okla.
Moreno, Joseph DeR.	Maj., M.C.	Philippine Islands
Mouton, Percy D.	Capt., M.C.	Ross Fld., Arcadia, Calif.
Myers, David A.	Capt., M.C.	Kelly Fld., San Antonio, Tex.
Napier, Edward L.	Air-Plt. Maj., M.C.	McCook Field, Dayton, Ohio.
Neblett, Herbert C.	Maj., M.C.	Langley Fld., Hampton, Va.
Peak, Ira F.	1st Lt., M.C.	M.R.L. Mitchel Fld., L. I., N. Y.
Peters, Byron J.	1st Lt., M.C.	Fairfield, A.I.D., Fairfield, O.
Poole, Francis H.	Maj., M.C.	Mather Fld., Sacramento, Calif.
Powers, John B.	Capt., M.C.	M.R.L. Mitchel Fld., L. I., N. Y.
Pratt, Fabian L.	Capt., M.C.	Scott Field, Belleville, Ill.
Reinartz, Eugen G.	Capt., M.C.	Mather Fld., Sacramento, Calif.
Scott, Verner T.	Capt., M.C.	Bolling Field, Anacostia, D. C.
Shook, Charles F.	1st Lt., M.C.	MAID Montgomery, Ala.
Smith, Andrew W.	Air-Plt. Capt., M.C.	Crissy Fld., Presidio, San Francisco, Calif.
Simpson, Robert K.	Capt., M.C.	Brooks Fld., San Antonio, Tex.
Stanton, John Earl	1st Lt., M.C.	Philippine Islands
Steenberg, Hubert S.	Capt., M.C.	Bolling Field, Anacostia, D. C.
Strong, Samuel M.	Air-Plt. Maj., M.C.	Mitchel Fld., L. I., N. Y.
Taft, Lloyd Earl	Maj., M.C.	M.R.L. Mitchel Fld., L. I., N. Y.
Thorne, Fred H.	Capt., M.C.	Carlstrom Fld., Arcadia, Fla.
Warriner, Benjamin B.	Maj., M.C.	OCAS Washington, D. C.
White, Wm. M.	Capt., M.C.	Ellington Fld., Houston, Tex.
Willey, Gordon F.	Air-Plt. Capt., M.C.	M.R.L. Mitchel Fld., L. I., N. Y.

Other Medical Dept. Officers

Bidwell, Alfred M.	Capt., M.C.	Carlstrom Fld., Arcadia, Fla.
Blakeley, Delmar R.	Capt., M.C.	Langley Fld., Hampton, Va.
Brause, Jacob L.	Major, D.C.	Langley Fld., Hampton, Va.
Buehler, Harold H.	Capt., D.C.	Mitchel Fld., L. I., N. Y.
Chase, Chauncey L.	Maj., M.C.	Mitchel Fld., L. I., N. Y.

Davis, Addison D.	Maj., M.C.	Army Balloon School, Ft. Omaha, Nebr.
Dodds, William P.	1st Lt., M.C.	Americus A.I.D., Americus, Ga.
Downs, Jirah Marston	Maj., M.C.	Ross Fld., Arcadia, Calif.
Duckworth, John F.	Maj., M.C.	Scott Fld., Belleville, Ill.
Evans, Logan I.	Capt., M.C.	Carlstrom Fld., Arcadia, Fla.
Forbes, Donald W.	Maj., D.C.	Kelly Fld., San Antonio, Tex.
Freebourn, William J.	Capt., M.A.C.	OCAS Washington, D. C.
Hamilton, Walter F.	Capt., M.C.	Montgomery Air Intermediate Depot, Montgomery, Ala.
Harrison, Ernest F.	Capt., M.C.	Brooks Fld., San Antonio, Tex.
Hart, Charles V.	Capt., M.C.	Miller Fld., Staten Is., N. Y.
Henry, William H.	Maj., M.C.	McCook Field, Dayton, Ohio.
Horton, Robert W.	Capt., M.C.	Fairfield A.I.D., Fairfield, Ohio.
Johnson, Barton M.	1st Lt., M.C.	Airdrome, Ft. Bliss, Texas.
Kaufman, Samuel	Maj., D.C.	Ross Fld., Arcadia, Calif.
Lewis, Ned O.	Maj., M.C.	Lee Hall, Va.
Love, Walter D.	Capt., D.C.	Army Balloon School, Ft. Omaha, Nebr.
Moore, Leland O. W.	1st Lt., M.C.	Rockwell A.I.D., Rockwell Fld., Calif.
Murrell, Ralph E.	Capt., M.C.	Kelly Field, San Antonio, Texas.
Simmons, Frederick S.	1st Lt., M.A.C.	M.R.L. Mitchel Fld., L. I., N. Y.
Smith, Stephen H.	Maj., M.C.	March Fld., Riverside, Calif.
Smith, William H.	Maj., M.C.	Chanute Fld., Rantoul, Ill.
Truby, Albert E.	Col., M.C.	OCAS Washington, D. C.
Van Kirk, Harry Hill	Maj., M.C.	Langley Fld., Hampton, Va.
Weldon, Thomas F.	1st Lt., M.C.	Mitchel Fld., L. I., N. Y.
Williams, Daniel B.	Capt., M.C.	Ross Fld., Arcadia, Calif.

Medical Officers Specially Authorized to Make Physical Examinations

Corby, John F.	Maj., M.C.	Attending Surgeon's Office, N. Y. City
Cramond, James E.	Capt., M.C.	Camp Lewis, Washington.
DeForest, Carl B.	Capt., M.C.	Camp Holabird, Md.
Keely, Henry E.	Capt., M.C.	Station Hosp., Ft. Sheridan, Ill.
Littig, John V.	Maj., M.C.	Fitzsimons' Gen. Hosp., Denver, Colo.
Macklin, Walter F.	Maj., M.C.	Ft. McPherson, Ga.
Stockton, Max R.	Maj., M.C.	Letterman' Gen. Hosp., San Francisco, Calif.
White, Lyle C.	Capt., M.C.	M.R.L. Mitchel Fld., L. I., N. Y.
Wilde, Adna G.	Maj., M.C.	Ft. Banks, Mass.

Taking Flight Surgeons Course at M.R.L. Mitchel Fld., L. I., N. Y.

Baker, Cadmus J.	Maj., M.C.	Jarman, Bernard L.	Capt., M.C.
Clinard, Shores E.	Capt., M.C.	Kice, Luther H.	Capt., M.C.
		White, Lyle, C.	Capt., M.C.

Key) * Detailed † Attached

Names and Addresses of Warrant Officers on Duty with the Air Service

Bahel, Frank	ABS Lee Hall, Va.
Bailey, Warren C.	Mitchel Fld., L. I., N. Y.
Balzart, Sep. A.	Brooks Field, San Antonio, Texas
Bergbom, Charles E.	Langley Fld., Hampton, Va.
Billingsley, Harrison	France Field, Cristobal, C. Z.
Bloom, Albert	San Antonio Air Intermediate Depot, Kelly Field, San Antonio, Tex.
Bradshaw, Leland D.	Langley Fld., Hampton, Va.
Braig, Eugene C.	Langley Fld., Hampton, Va.
Brewer, Walter E.	Fairfield Air Intermediate Depot, Fairfield, Ohio.
Brown, Joseph	Kelly Fld., San Antonio, Tex.
Caddagan, C. H.	6th Corps Area, Ft. Sheridan, Ill.
Callaghan, William J.	Middletown Air Intermediate Depot, Middletown, Pa.
Chester, Charles	San Antonio Air Intermediate Depot, Kelly Field, San Antonio, Tex.
Corcoran, John W.	Manila, P. I.
Collins, James S.	8th Corps Area, Ft. Sam Houston, Tex.
DeGoode, Clarence E.	Luke Field, Pearl Harbor, H. T.
Diamond, Robert H.	ABS, Ross Field, Arcadia, Calif.
Dodd, Wilburn C.	ASMS Chanute Fld., Rantoul, Ill.
Firmes, Thomas A.	Little Rock Air Intermediate Depot, Little Rock, Ark.
Hewitt, Cecil	France Field, Cristobal, C. Z.
Hoagland, George B.	Langley Fld., Hampton, Va.
Howry, John	Kelly Fld., San Antonio, Tex.
Huff, Amos E.	March Fld., Riverside, Calif.
Hurley, Michael J.	McCook Field, Dayton, Ohio.
Jackson, Perry B.	Kelly Fld., San Antonio, Tex.
Kennedy, John J.	Luke Field, Pearl Harbor, H. T.

Knight, Herbert G.	Fairfield Air Intermediate Depot, Fairfield, Ohio.
Lassiter, Robert E.	Manila, P. I.
Mason, William F.	Bolling Field, Anacostia, D. C.
Mayberry, Charles R.	Kelly Fld., San Antonio, Tex.
Menz, James	France Field, Cristobal, C. Z.
Mills, Byron H.	Richmond Air Intermediate Depot, Richmond, Va.
O'Connell, John J.	Montgomery Air Intermediate Depot, Montgomery, Ala.
Payne, Charles	Rockwell Air Intermediate Depot, Coronado, Calif.
Riley, James	2nd Corps Area, Governors Island, N. Y.
Scott, George	Rockwell Air Intermediate Depot, Rockwell Field, Coronado, Calif.
Shepard, John	Americus Air Intermediate Depot, Americus, Ga.
Smith, Charles M.	Fairfield Air Intermediate Depot, Fairfield, Ohio.
Spelbrink, Bernard H.	Kelly Fld., San Antonio, Tex.
Tebo, Albert H.	Rockwell Air Intermediate Depot, Rockwell Field, San Diego, Calif.
Thomas, James A.	McCook Field, Dayton, Ohio.
Tibbets, John, M.	Middletown Air Intermediate Depot, Middletown, Pa.
Trabold, Arthur R.	Langley Fld., Hampton, Va.
Truello, Adam	5th Corps Area, Ft. Benjamin Harrison, Indiana.
Wallace, Emory L.	France Field, Cristobal, C. Z.

AIR MAIL SERVICE

POST OFFICE DEPARTMENT

Hon. Paul Henderson

Second Assistant Postmaster General

General Superintendent - C. F. Egge
Assistant General Supt. - C. I. Stanton
Superintendent of Radio - J. C. Edgerton
Chief Clerk - G. L. Conner

Division Superintendents

Eastern - J. E. Whitbeck, Hazelhurst
Field, L. I.
Central - A. R. Dunphy, Omaha, Nebr.
Western - G. H. Colwell, San Francisco,
Calif.

Air Mail Warehouse

E. J. Scanlon, Superintendent, 115 Gotthardt St., Newark,
N. J.

Air Mail Depot

R. G. Page, Superintendent, Maywood, Ill.

AIR MAIL STATIONS:

New York (Hempstead, -
L. I.) - P. P. Kirkman, Manager
Bellefonte, Penna. - E. J. Gelhous, "
Cleveland, Ohio - Howard B. Shaver, "
Bryan, Ohio - O. D. Christner, "
Maywood (Chicago), Ill. - D. B. Colyer, Assistant Supt.
Iowa City, Iowa - Hugh S. Long, Manager
Omaha, Nebr. - James T. King, "
North Platte, Nebr. - Chas. A. Sluder, "
Cheyenne, Wyo. - H. F. Mummert, Assistant Supt.
Rawlins, Wyo. - C. F. Krebs, Manager
Rock Springs, Wyo. - H. D. Ingalls, "
Salt Lake City, Utah - Arlen C. Nelson, Asst. Supt.
Elko, Nevada - Edw. M. Barber, Manager
Reno, Nevada - O. A. Tomlinson, "
San Francisco, Calif. - W. E. LaFollette. "

Record of Pilots, Showing Date of Appointment, Miles Flown and Number of Hours in Air from Date of Appointment to Oct. 31, 1921

Name	Date of Appointment	Number of Miles Flown	Number of Hours in Air
Lee, E. H.	Dec. 29 1918	80,924	1074
Lewis, H. T.	March 27, 1919	64,784	733 (a)
Knight, J. H.	June 25, 1919	97,129	1101 (b)
Ellis, R. H.	July 7, 1919	57,076	642 (c)
Page, R. G.	July 9, 1919	40,306	505 (d)
Leonhardt, E. C.	Sept. 19, 1919	100,218	1107
Smith, W. J.	Sept. 19, 1919	85,029	1013
Smith, W. L.	Nov. 8, 1919	70,942	850
Hopson, W. C.	April 14, 1920	93,296	936
Lange, C. C.	April 20, 1920	46,585	527 (e)
Vance, C. K.	April 20, 1920	31,394	356 (f)
Huking, H. K.	May 3, 1920	53,963	668
Smith, D. C.	May 21, 1920	53,886	603
Scott, P. P.	May 22, 1920	44,987	570 (g)
Jones, R. G.	June 23, 1920	53,052	682
Brown, H. C.	July 20, 1920	57,470	709
Garrison, L. H.	July 31, 1920	51,708	607
Boggs, S. S.	Aug. 2, 1920	34,436	386
Williams, W. D.	Aug. 10, 1920	55,795	672
Yager, F. R.	Aug. 10, 1920	60,349	703
Chandler, H. A.	Aug. 16, 1920	34,659	428
Allison, E. M.	Aug. 23, 1920	53,792	643
Smith, H. G.	Aug. 31, 1920	55,124	627
Little, R. J.	Sept. 7, 1920	48,221	573
Eaton, J. L.	Sept. 8, 1920	42,629	506
Mouton, E. E.	Sept. 8, 1920	66,962	722
Thompson, H. C.	Sept. 10, 1920	43,159	499
Marshall, Tex.	Sept. 21, 1920	51,230	613
Winslow, B. H.	Sept. 22, 1920	28,579	377
Moore, J. F.	Sept. 30, 1920	52,023	607
Colyer, C. B. D.	Oct. 6, 1920	48,623	562
Unger, K. R.	Oct. 8, 1920	46,197	479
Paine, T. O.	Dec. 4, 1920	55,891	657
Ames, C. H.	Dec. 8 1920	20,740	229
Blanchfield, W. F.	Jan. 3, 1921	17,294	190
Webster, J. O.	Jan. 3, 1921	26,453	298
Kiser, Dan	Jan. 11, 1921	32,357	350
Collins, P. F.	Feb. 12, 1921	20,758	223
Levissee, R. B.	Feb. 24, 1921	31,798	351
Johnson, C. E.	March 10, 1921	21,165	257
Yackey, W. A.	March 10, 1921	7,243	83
Boonstra, H. G.	March 14, 1921	9,112	117
Collinson, H. A.	May 27, 1921	16,158	191

(a) Discontinued September 6, 1920; reappointed March 26, 1921. (b) Discontinued May 20, 1920; reappointed October 15, 1920. (c) Discontinued September 9, 1920; reappointed May 19, 1921. (d) Test pilot, and holds supervisory position. (e) Discontinued October 12, 1920; reappointed October 12, 1920; reappointed March 23, 1921. (f) Discontinued July 31, 1921; reappointed February 24, 1921. (g) Discontinued August 30, 1920; reappointed September 18, 1920.

BUREAU OF AERONAUTICS

NAVY DEPARTMENT

General Organization and Officer Complement

Chief of Bureau

Rear Admiral W. A. Moffett

Asst. Chief of Bureau

Captain H. C. Mustin

Chief of Bureau:— Rear Admiral W. A. Moffett, U.S.N. Asst. Chief of Bureau:— Captain H. C. Mustin, U.S.N. Aide to Chief of Bureau:— Comdr. W. J. Giles, U.S.N. Plans Division Comdr. T. G. Ellyson <i>War Plans</i> <i>Heavier-than-air</i> Lt. Comdr. W. Capehart <i>Lighter-than-air</i> Lt. Comdr. Z. Lansdowne <i>Information</i> Lt. F. H. Becker <i>Technical</i> Lt. C. B. Harper Material Division Comdr. E. S. Land <i>Design</i> Comdr. J. C. Hunsaker Lt. Comdr. G. Fulton Lt. Comdr. B. G. Leighton <i>Scientific Group</i> Lt. C. B. Harper Lt. C. H. Congdon <i>New Design H/A</i> Lt. R. D. MacCart <i>New Design L/A</i> Lt. C. E. Bauch <i>Aerodynamics</i> Lt. W. S. Diehl <i>Structures</i> Lt. C. J. McCarthy <i>Instruments</i> Lt. E. W. Rounds <i>Engines</i> Lt. Comdr. C. B. Wilson <i>Engine Installation</i> <i>Propellers</i> Ens. F. Miller <i>Materials</i> <i>Flight Testing</i> Lt. E. F. Stone Lt. B. G. Bradley <i>Catapults, Arresting Gears</i> Lt. E. F. Stone	<i>Maintenance</i> Lt. Comdr. E. M. Kraus <i>Public Works</i> Lt. V. R. Dunlap <i>Supply</i> Lt. W. S. Hactor <i>Operating Requirements</i> Lt. K. McGinnis Flight Division Lt. Comdr. E. W. Spencer <i>Operations</i> Lt. G. Morgan <i>Training</i> F. W. Neilson <i>Personnel</i> Lt. R. G. Pennoyer <i>Aerology</i> Lt. C. N. Keyser <i>Photography</i> Lt. W. L. Richardson Administration Division Comdr. V. K. Coman <i>Financial and Legal</i> Lt. Comdr. R. M. Griffin <i>Administration</i> Lt. Comdr. <i>Civil Personnel</i> Lt. Comdr. S. H. Quarles <i>Publicity and Information</i> Lt. Comdr. Headquarters, U. S. Marine Corps, Aviation. Lt. Col. T. C. Turner, USMC. Capt. R. E. Williams, USMC. Naval Air Station, Pensacola, Fla.— Captain H. H. Christy, USN., C.O. Comdr. J. H. Towers, USN. Capt. of the Yard Naval Air Station, Hampton Roads, Va.— Capt. S. H. R. Doyle, USN., C.O. Lt. Comdr. G. C. Dichman, USN., Executive. Naval Air Station, Lakehurst, N. J. Lt. Comdr. J. P. Norfleet, USN., C.O. Lieut. A. R. Houghton, USN., Executive. Naval Air Station, Anacostia, D. C. Lt. Comdr. C. Y. Johnston, C.O. Lt. H. J. Brow, USN., Executive.	Naval Air Station, Coco Solo, C. Z. Lieut. F. W. Byers, USN., C.O. Naval Air Station, San Diego, Calif. Comdr. F. R. McCrary, USN., C.O. Naval Air Station, Pearl Harbor, T. H. Lt. Comdr. R. D. Kirkpatrick, USN., C.O. Ensign N. M. Kindell, USN., Executive. U. S. Atlantic Fleet Air Squadrons Capt. A. W. Johnson, USN., Comdr. Comdr. A. C. Read, USN., Exec. Aide. Air Boat Squadrons— Lt. Comdr. H. B. Cecil, USN., C.O. Lt. W. D. Thomas, USN., Exec. Torpedo Plane Squadrons— Lt. Comdr. H. T. Bartlett, USN., C.O. Lt. E. L. Ericsson, USN., Executive. U. S. Pacific Fleet Air Squadrons. Capt. H. V. Butler, USN., Comdr. Lt. Comdr. P. N. L. Bellinger, USN., Exec. Aide. Spotting Squadron No. 4— Lt. Comdr. M. A. Mitscher, USN., C.O. Combat Squadron No. 4— Lt. Comdr. W. Masek, USN., C.O. Spotting Squadron No. 3— Lt. Comdr. G. D. Murray, USN., C.O. Combat Squadron No. 3— Lieut. F. W. Wead, USN., C.O. Patrol Squadron— Lieut. G. L. Compo, USN., C.O. Marine Flying Field, Quantico, Va. Maj. Roy S. Gelger, USMC., C.O. First Air Squadron, Santo Domingo City, D. R.— Maj. Alfred A. Cunningham, USMC., C.O. Fourth Air Squadron, Port au Prince, Haiti. Maj. Francis T. Evans, USMC., C.O. Flight "L", Sumay, Guam, M. I. Capt. Ralph J. Mitchell, USMC., C.O. Marine Flying Field, Parris Island, S. C. 2nd Lieut. Willard R. Enk, USMC., C.O. Marine Aviation Detachment, Naval Training Station, Great Lakes, Ill. Marine Gunner Frank F. Puttamer.
---	--	---

Bureau of Aeronautics, Material Division Organization of Field Inspection Force

General Inspector of Aircraft, Central Office (Curtiss A & M Co.) Eastern District Lt. C. N. Lique Lt. (j.g.) Schmidt Inspector Naval Aircraft, Aeromarine Co., Keyport, N. J. Inspector Naval Aircraft, Curtiss A. & M. Co., Garden City, L. I. Lt. Hewitt Inspector Naval Aircraft, Conn. Air Co., New Haven, Conn.	Inspector Naval Aircraft, Gallaudet Air Co., East Greenwich, R. I. Lt. (j.g.) Orr Inspector of Naval Aircraft, Davis Douglas Co., Los Angeles, Calif. Lt. F. J. Wilson General Inspector of Aircraft, Central Office (Mc Cook Field) Central District Lt. Comdr. K. F. Smith Lt. Price Inspector Naval Aircraft, Dayton-Wright Co., Dayton, Ohio.	Lt. Comdr. Elmer Corp. L. J. Larsen Inspector Naval Aircraft, Stout Eng. Lab. Inc., Detroit, Mich. Lt. (j.g.) Knox Lt. Noville USNRF Inspector Naval Aircraft, Goodyear T. & R. Co., Akron, Ohio. Lt. (j.g.) Whittle Inspector Naval Aircraft, G. Elias & Bros., Buffalo, N. Y. Lt. (j.g.) Whiting USNRF
---	---	--

NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

2722 Navy Building, 17th and B Streets, N. W.

WASHINGTON, D. C.

Members

Chas. D. Walcott, Chairman
S. W. Stratton, Secretary
Joseph S. Ames
Major Thurman H. Bane, U. S. A.
Captain Wm. A. Moffett, U. S. N.
Wm. F. Durand

John F. Hayford
Chas. F. Marvin
Maj. Gen. M. M. Patrick, U. S. A.
Michael I. Pupin
Rear Admiral D. W. Taylor, U. S. N.
Orville Wright

Executive Committee

Chas. D. Walcott
S. W. Stratton, Secretary
Joseph S. Ames, Chairman
Maj. Thurman H. Bane, U. S. A.
Captain Wm. A. Moffett, U. S. N.

John F. Hayford
Chas. F. Marvin
Maj. Gen. M. M. Patrick, U. S. A.
Rear Admiral D. W. Taylor, U. S. N.

G. W. Lewis, Executive Officer

J. F. Victory, Assistant Secretary

J. J. Ide, Technical Assistant in Europe

Committee on Power Plants for Aircraft

S. W. Stratton Chairman
Henry M. Crane
Harvey N. Davis
L. M. Griffith
Capt. G. E. A. Hallett, U. S. A.
Lt. Comdr. S. M. Kraus, U. S. N.
G. W. Lewis
J. G. Vincent
H. C. Dickinson, Acting Secretary

Committee on Materials for Aircraft

Chas. F. Marvin, Chairman
G. K. Burgess, Vice-Chairman
Mr. J. B. Johnson
Henry A. Gardner
George B. Haven
Comdr. J. C. Hunsaker, U. S. N.
A. M. Hunt
Zay Jeffries
Edward P. Warner
Carlile P. Winslow
H. L. Whittemore, Acting Secretary

Committee on Aerodynamics

John F. Hayford, Chairman
Joseph S. Ames, Vice-Chairman
Maj. Thurman H. Bane, U. S. A.
L. J. Briggs
Edward P. Warner, Secretary
Comdr. J. C. Hunsaker, U. S. N.
Franklin L. Hunt
Maj. Harold S. Martin, U. S. A.
Chas. F. Marvin
C. I. Stanton
A. F. Zahm

Technical Personnel

L. M. Griffith, Senior Staff Engineer
F. H. Norton, Chief Physicist
Edward P. Warner, Secretary, Committee on Aerodynamics
D. L. Bacon, Assistant Physicist
Thomas Carroll, Airplane Test Pilot
W. G. Brown, Assistant Physicist
William C. Morgan, Mechanical Engineer
Robertson Matthews, Mechanical Engineer
Marsden Ware, Mechanical Engineer
Henry J. E. Reid, Junior Mechanical Engineer
H. S. Webster, Junior Mechanical Engineer
Arthur W. Gardiner, Mechanical Engineer
Henry I. Hoot, Junior Mechanical Engineer
John W. Crowley, Jr., Junior Mechanical Engineer.

AERO CLUBS OF THE UNITED STATES

Aero Club of America

Representative of the Federation Aeronautique Internationale

Officers

President: Benedict Crowell
1st Vice-President: Chas. Jerome Edwards
2nd Vice-President, James A. Blair, Jr.
3rd Vice-President: Godfrey L. Cabot
4th Vice-President: F. Trubee Davison
Treasurer: Philip J. Roosevelt
Executive Secretary: Harold E. Hartney
Recording Secretary: Augustus Post

Board of Governors

S. R. Bertron	Nelson Doubleday
James A. Blair, Jr.	Chas. Jerome Edwards
Chas. J. Biddle	Bradley A. Fiske, U. S. N.
Cortlandt Field Bishop	Myron T. Herrick
Caleb S. Bragg	George H. Houston
Godfrey L. Cabot	Richard F. Hoyt
Philip A. Carroll	Albert Bond Lambert
Benjamin F. Castle	John D. Larkin
Maurice G. Cleary	William A. Larned
Howard E. Coffin	Charles E. Merrill
Benedict Crowell	George M. Myers
F. Trubee Davison	Arthur A. O'Brien
Gould Dietz	Philip J. Roosevelt
Lorillard Spencer	

COMMITTEES, FOR FISCAL YEAR NOVEMBER 1921 — NOVEMBER 1922

House Committee

Cole J. Younger, Chairman
A. Travers Ewell
W. Daly
Charles Jerome Edwards
Augustus Post

Membership Committee

Col. Harold E. Hartney, Chairman
Philip J. Roosevelt
Eddie Rickenbacker

Law Committee

Philip A. Carroll, Chairman
W. W. Niles
Stephen Philbin
W. Jefferson Davis

Finance Committee

Howard E. Coffin, Chairman
C. M. Keys
Richard F. Hoyt
Philip J. Roosevelt

Auditing Committee

George H. Houston, Chairman
Albert P. Loening
Cole J. Younger
Charles H. Cox

Foreign Relations Committee

Frank P. Lahm, Chairman
Major William A. Scully
Philip A. Carroll
F. Trubee Davison
Admiral Bradley A. Fiske, U. S. N.

Balloon Committee

Ralph H. Upson, Chairman
Howard A. Scholle
Allan R. Hawley
George M. Meyers
Albert B. Lambert
Jerome Kingsbury
Thomas S. Baldwin
A. Leo Stevens
Augustus Post
Ward T. Van Orman

Collier Trophy Committee

Henry Crane, Chairman
William A. Larned
James A. Blair, Jr.
Caleb S. Bragg

Special Banquet Committee

Benedict Crowell, Chairman
Howard E. Coffin
James A. Blair, Jr.
Maurice G. Cleary
Caleb S. Bragg
Cole J. Younger
Augustus Post
Howard A. Scholle

Foreign Service Committee

Myron T. Herrick, Hon. Chairman
Sidney B. Veit, Hon. Secretary
Dr. A. L. Hipwell, Treasurer
Frank S. Lahm
William S. Hogan
E. L. Gros, M. D.
Louis D. Beaumont
G. Campbell Wood
Lt. Col. William Thaw
John Weare

Library Committee

Howard A. Scholle, Chairman
Cortlandt F. Bishop
Chas. Jerome Edwards
Ladislas d'Orey
Ralph H. Upson

Technical Committee

Henry Crane, Chairman
Jesse G. Vincent
Grover C. Loening
Jerome C. Hunsaker
Rear Admiral B. A. Fiske
Elmer A. Sperry
Alexander A. Klemm
W. B. Stratton
Charles M. Manly
J. G. Coffin
Dr. A. F. Zahm
Commander H. C. Richardson
C. F. Marvin, Chief Weather Bureau
Capt. G. E. A. Hallett, McCook Field
H. C. Dickenson
W. D. A. Ryan, Gen. Elec. Co. (Lighting)
Major Thurman H. Bane
Glenn L. Martin
Chas. L. Lawrance
Dr. F. L. Hunt, Bureau of Standards

Airways & Maps Committee

A. Travers Ewell, Chairman
 Howard A. Scholle
 Major W. G. Schauffler
 Hugh D. McKay
 Major Smith (Fla.)
 E. Lester Jones, Chief, U. S. Geodetic Survey
 Ralph H. Upson
 Charles J. Biddle
 Horace Hickam
 Otto Praeger
 Charles Dickenson
 Capt. S. C. Coon
 Albert B. Lambert
 O. C. Merrill, Chairman, Board of Surveys and Maps of the
 Federal Government, Wash., D. C.
 Fred Harvey, Jr.
 Gouid Dietz
 Chas. A. Johnson, Denver, Colo.
 Guy T. Slaughter
 George B. Harrison
 W. E. Boeing, Seattle, Wash.

Contest Committee

Regular Members

Caleb S. Bragg, Chairman
 Nelson Doubleday
 Maurice G. Cleary
 Harold E. Hartney
 Harry F. Guggenheim
 David McCullough
 Henry Crane
 Alexander Klemin
 William A. Larned
 Richard F. Hoyt
 Howard Scholle

Asso. Members

R. W. Schroeder, Chicago
 Eddie Rickenbacker, Detroit
 Jessie T. Vincent, Detroit
 Sidney D. Waldon, Detroit
 Harold E. Hartney, Washington
 Robert Breese, Paris

Timers

R. A. Leavell, Chicago
 L. M. Woolson, Detroit

PERSONNEL OF OFFICERS AND COMMITTEES, OTHER AERO CLUBS

Aero Club of Buffalo

75 Niagara St., Buffalo, N. Y.

President, John D. Larkin, Jr.; 1st Vice-President, Dr. Charles B. Cary; 2nd Vice-President, Ralph H. Sidway; 3rd Vice-President, W. J. Connors Jr.; Secretary and Treasurer, Paul Edson Green.

DIRECTORS

Theodore C. Knight, Frank H. Goodyear, E. L. Thomas, John M. Satterfield.

Aero Club of Chicago

139 North Clark St., Chicago, Ill.

President, P. G. B. Morris; Vice-President, Bion J. Arnold; Vice-President, H. H. Merrick; Secretary, P. G. Kemp; Treasurer, John Fletcher.

DIRECTORS

Thos. E. Wilson, John W. O'Leary, Edward L. Ryerson Jr., Lawrence Wilder, Arthur G. Cable, Philip K. Wrigley, James A. Keating, Mrs. Anna Baird, Ralph M. Snyder, Richard H. Regan, A. Sheldon Clark, C. H. Peterson, J. A. Maloney, Guernsey Close, Thos. T. Hoskins, Lee E. Daniels, Wm. P. McCracken, J. F. Cornelius, Cary Yound, F. J. Tomeczak.

Aero Club of Cincinnati

Metropole Hotel, Cincinnati, Ohio

President, John H. Stewart; Vice-Presidents, Cornelius J. Hauck and Mark Campbell; Treasurer, John M. Renner; Secretary, John E. Hendrixson.

DIRECTORS

John H. Stewart, Stuart R. Ducker, Albert M. Storrs, Robert H. Wheat, Bayle M. Richardson, John E. Hendrixson, Fred T. Macklin, L. B. Cahill Jr., H. W. Langmead.

Aero Club of Columbia University

Broadway and 116 St., New York City, N. Y.

President, Robert L. Burt; Vice-President, Robert A. Curry; Secretary-Treasurer, D. L. Russell.

Aero Club of Dayton

Dayton, Ohio

President, William C. Huber; Vice-President, W. E. Talbot; Treasurer, S. T. Hunter; Secretary, H. Brock.

Aero Club of Hartford

135 Church Street, Hartford, Conn.

President, Hiram Percy Maxim; Vice-President, Judge William J. Malone; Treasurer, Clarence M. Knox; Secretary, J. J. Van Schaak.

DIRECTORS

Hiram Percy Maxim, J. J. Van Schaak, Arthur G. Kinkley,

Hugh Rockwell, C. DeLancy Alton, Walter S. Schutz, William F. Ladd, Roswald E. Davis, Clarence M. Knox, Maynard T. Hazen, Frederick J. Rundbaken, Louis L. Hohenthal, Harold M. Hine, J. Marshall Holcombe Jr., James B. Slimmon.

Aero Club of Illinois

430 South Michigan Ave., Chicago, Ill.

President, Charles Dickinson; Vice-President, James S. Stephens; Secretary, Lee Hammond; Treasurer, John B. Cunningham.

DIRECTORS

Harold F. McCormick, Charles G. Dawes, John T. McCutcheon, Dorr E. Felt, Bion J. Arnold, Robert G. McGann, William Bartholomay Jr., Walter Brock.

Aero Club of La Crosse

120 North Fifth St., La Crosse, Wis.

President John P. Salzer; Vice-President A. A. Bentley; Treasurer, H. K. Holley; Secretary, James R. Kinsloe.

DIRECTORS

C. K. Pettingill, F. H. Pitman, A. J. Roberge, O. R. Skaar, J. M. Storkerson, F. H. Burgess, C. H. Collins, William Helfach, F. P. Hixson, W. F. Hurtgen, Lloyd Lamb, Norman L. Moll, chairman membership committee.

Aero Club of Louisiana

Fellman's Aviation Field, Peters and S. Claiborne Aves. New Orleans, La.

President, Raymond H. Saal; 1st Vice-President, Robert H. Ransom; Secretary, George Danziger; Treasurer, Gordon Callender; Chairman Board of Directors, V. L. A. Steger; Officer in Charge of Flying Fields, Marshall Callender.

Aero Club of Michigan

Detroit, Mich.

President, S. D. Waldron; Vice-Presidents, H. B. Joy and F. M. Alger; Treasurer, R. D. Chapin; Secretary, Mason P. Rumney.

Aero Club of Minneapolis

85 South Tenth Street, Minneapolis, Minn.

President, R. R. Rand Jr.; Vice-President, William F. Brooks; Treasurer, Harry C. Piper; Secretary, Paul Goldsborough; Manager, Mark M. Hurd; Assistant Manager, E. Cronkright.

DIRECTORS

William F. Brooks, John P. Snyder, Joseph Chapman, R. R. Rand Jr., Matthew D. Crawford, Ray S. Miller, Murray K. Guthrie, V. F. Rotering, Gleen Taer, Charles S. Pillsbury, Isaaz Hazelett, Guy A. Thomas, Paul W. Latham, F. B.

Hubachek, R. G. Browning, Harry C. Piper, Lawrence W. Carpenter, Philip J. Barnes, H. M. Gardner, Earle Brown, F. A. Chamberlain, D. Draper Dayton, Vincent G. Dodds, Mark M. Hurd, Weldon Larrabee, R. G. Robertson, Douglas K. Kennedy, C. T. A. Hart, Rockwood W. Bullard.

ENTERTAINMENT COMMITTEE

Jefferson Jones, Chairman; Edgar Allen, Joo McDermott, Addison Lewis, Weldon Larrabee.

PUBLICITY COMMITTEE

Kenneth Smith, Chairman; Jefferson Jones, Clarence B. Winter, Thomas J. Dillon, Sterrett Neal.

HOUSING COMMITTEE

Walter Robb, Chairman; Donald Hudson, Frank Bigelow, Preston L. Crichton, Rockwood Bullard.

MEMBERSHIP COMMITTEE

Robert G. Browning, Chairman; Paul Goldsborough, Douglas Kennedy.

Aero Club of Massachusetts

1034 Old South Building, Boston, Mass.

President, Byrle J. Osborn; Vice-President, Peter C. Borre; Treasurer, Arthur L. Richmond; Secretary, Leslie P. Dodge.

Aero Club of Oregon

Portland, Ore.

President, L. B. Hickman; 1st Vice-President, Merrill B. Moores; 2nd Vice-President, Frank J. Miller; Secretary, George Quayle; Treasurer, L. Therkleson; Governor, Vick Vernon.

AUDITING COMMITTEE

Chas. C. Scott, Chairman; B. F. Brownlow, E. A. Bullington.

ENTERTAINMENT COMMITTEE

Harold M. Grady, Chairman; Milton R. Klepper, George E. Love, Frank E. Watkins.

HOUSE COMMITTEE

Perry W. P. Johnston, Chairman; A. L. Inman, Thomas Sketchley, Ned V. Tanner.

LANDING FIELD COMMITTEE

Bernard Metzger, Chairman; A. L. Inman, Thomas Sketchley, Ned V. Tanner.

LEGISLATIVE COMMITTEE

Milton R. Klepper, Chairman; Harold Grady, George M. Kyle.

MEMBERSHIP COMMITTEE

Bruce Hollingsworth, Chairman; George E. Love, L. Therkleson.

COMMITTEE ON SCIENCE, RESEARCH AND EDUCATION
Russel W. Frost, F. A. Bullington, George M. Kyle.

Aero Club of Pennsylvania

1421 Chestnut St., Philadelphia, Pa.

President, Joseph A. Steinmetz; 1st Vice-President, William H. Sheahan; 2nd Vice-President, Henry F. Bamberger; George S. Gassner.

DIRECTORS

Charles L. Hower, George S. Ireland, W. Wallace Kellet, Frank A. L. Leahy, Roy G. Miller, D. J. Spence Jr., Arthur S. Truscott.

Aero Club of New England

305 Tremont Building, Boston, Mass.

President, Godfrey L. Cabot; 1st Vice-President, Josiah S. Hathaway; 2nd Vice-President, J. Walter Flagg; Secretary, William Carroll Hill; Treasurer, Alfred R. Shrigley.

DIRECTORS

Godfrey L. Cabot, J. Walter Flagg, Charles J. Glidden, Josiah S. Hathaway, William Carroll Hill, Henry Howard, Parker H. Kemble, Alfred R. Shrigley, Carl E. Shumway, Nelson H. Smith, Cyrus H. Stowell, John J. VanValkenburgh.

Aero Club of Southern California

327 Higgins Bldg., Los Angeles, Calif.

President-Treasurer, S. M. Spalding; 1st Vice-President, K. M. Turner; 2nd Vice-President, John H. Fisher.

DIRECTORS

S. M. Spalding, K. M. Turner, John H. Fisher, Frederic Whitney, John B. Miller, A. R. Peck, Albert Lee Stephens, J. A. Jevne, Lee A. Phillips.

Aero Club of Utah

Salt Lake City, Utah

President, C. L. Nelson; Vice-President, R. D. Kelly; Secretary, A. C. Nelson; Treasurer, William H. Gibson.

DIRECTORS

N. F. Godbe, W. B. Stringham, F. S. Thompson, J. A. Carter, G. H. Higgs.

Aero Club, University of Minnesota

Minneapolis, Minn.

President, Carlos W. del Plaine; Vice-President, Robert C. Murray; Secretary, George Meyler; Treasurer, Ivy Parks.

Aero Club of Wisconsin

373 Broadway, Milwaukee, Wis.

President, F. A. Vaughn; Treasurer, Gilbert V. Martin; Secretary, Joseph H. Smith.

Aero Miles City Club

Miles City, Mont.

President, H. B. Wiley; Vice-President, Carl B. Calvin; Secretary, W. G. Ferguson; Treasurer, L. K. Mills.

DIRECTORS

H. B. Wiley, Carl B. Calvin, L. K. Hills, W. G. Ferguson, Earl T. Vance.

Aeronautical Engineering Society

Mass. Inst. of Tech., Cambridge 39, Mass.

President, R. D. Fairbanks; Vice-President, J. L. Truslow; Secretary, C. T. Ludington; Treasurer, F. Maconi.

Aeronautical Society

University of Michigan, Ann Arbor, Mich.

President, S. J. De France; Vice-President, R. D. Smith; Secretary, S. N. Lawson; Treasurer, W. Goetz.

Allied Fliers Club

812 Federal Realty Building, Oakland, Calif.

President, Harvey M. Pugh; Vice-President, Harris Allen; Treasurer, Harold Edgar; Secretary, Llewellyn B. Peck.

DIRECTORS

Harold Austin, Robert Haskell, Charles Bowman, Roy MacDonald, Herbert W. Ryder, William H. Davis Jr., Allyn Smith.

Aircraft Club of Peoria

Peoria, Ill.

President, Eugene Brown; Vice-President, Harry E. Cumerford; Secretary and Treasurer, J. S. Hammes.

American Flying Club of Baltimore

Automobile Club Building, 137 W. Mt. Royal Ave., Baltimore, Md.

President, W. Frank Roberts; 1st Vice-President, Robertson Griswold; 2nd Vice-President, R. W. Alexander; 3rd Vice-President, George L. Jones; 4th Vice-President, John A. Hambleton; Secretary, William D. Tipton; Executive Secretary, A. Edgar Hill; Treasurer, Harold W. Hinds.

DIRECTORS

R. W. Alexander, B. Howell Griswold Jr., Van Lear Black, Robertson Griswold, Robert Garrett, Temple N. Joyce, W. Frank Roberts, William D. Tipton, Percy P. Turner, J. Murdock Dennis, John H. Hessey, Harold W. Hinds, George L. Jones, W. W. Moss, Stuart Oliver, Charles B. Reeves, Adj. Gen. Milton A. Reckord, Townsend Scott Jr., C. Bensin Dushane Jr., Charles B. Gillet, John A. Hambleton, Howard A. Kelly Jr., Lewis R. Lenke, Frank W. Lawson, Garland W. Powell, Maj. A. L. Sneed, Henry W. Warfield.

American Flying Club of Virginia

P. O. Box 871, Richmond, Va.

Honorary President, E. Donald Cameron; President, John

W. Williams Jr.; 1st Vice-President, Charles B. Robertson Jr.; 2nd Vice-President, E. Turner Bethel; Secretary and Treasurer, A. Woolner Calisch.

BOARD OF GOVERNORS

John W. Williams Jr., E. Donald Cameron, Charles B. Robertson Jr., E. Turner Bethel, A. Woolner Calisch, Littlepage Ingram, Joe Baker, John B. Cary, Pryor Campbell.

Aviation Country Club of Detroit

309 Free Press Building, Detroit, Mich.

President, H. W. Alden; Vice-President, Walter G. Nicholson; Secretary, Fred E. Hudson; Treasurer, C. G. Rowlette.

ADVISORY BOARD

Henry M. Leland, Col. Sidney D. Waldon, Col. J. G. Vincent, C. F. Kettering, Capt. Eddie Rickenbacker.

DIRECTORS

H. W. Alden, Walter G. Nicholson, B. F. Everitt, Fred W. Warner, Cramer Smith, E. J. Woodison, D. R. Wilson, E. LeRoy Pelletier, C. G. Rowlette, John E. King, G. B. Duffield, Fred E. Hudson, Walter Stanley.

Buffalo Aero Science Club

48 Dodge St., Buffalo, N. Y.

President, Christian Weyand; Vice-President, Leon Schreier; Secretary, J. William Schreier; Treasurer, Clarence Gellart; Publicity and Literature, Knute Kling.

Cleveland Aviation Club

The Hotel Statler, Cleveland, Ohio

President, Henry C. Wick, Jr.; 1st Vice-President, Frank H. Boyd; 2nd Vice-President, Alton F. Baker; Secretary, Hy. W. Burton; Treasurer, John R. Bloss.

DIRECTORS

I. H. Case, A. W. Harris, I. J. Herbert.

Colorado Aero Club

Denver, Col.

President, Charles A. Johnson; 1st Vice-President, I. B. Humphrey; 3rd Vice-President, Jerry Vasconcelles; Treasurer, J. Foster Symes; Secretary, Harold F. Johnson.

DIRECTORS

W. W. Barnett, W. N. Blayney, Claude K. Boettcher, Tyson S. Dines, I. B. Humphreys, Charles A. Johnson, Harols F. Johnson, Harold Kountze, Donald McWhirter, J. M. Patterson, Spencer Penrose, Lawrence Phipps Jr., J. Foster Symes, Jerry Vasconcelles, H. P. Wells.

Commerce Club

St. Joseph, Miss.

AVIATION COMMITTEE

C. H. Wolfley, Chairman, Dr. J. P. Bass, E. H. Lawhon, V. C. Boyd, Horace J. Wood, William E. Spratt.

Flying Club of Kansas City

Kansas City, Mo.

President, R. B. Barnitz; Vice-President, R. R. Lester; Secretary and Treasurer, D. M. Steele.

EXECUTIVE COMMITTEE

Simpson Yeomans, Chairman, Dudley M. Steele, Fred Mann, Lawrence Winn Jr., Charles Carpenter, Robert R. Lester, Dix Edwards, James B. Harvey, Francis Poindexter, R. B. Barnitz, Bradley Saunders.

CONTEST COMMITTEE

D. M. Steele, F. H. Harvey, R. Crittenden.

Grand Rapids Aero Club

Grand Rapids, Mich.

President, Raymond W. Smith; Vice-President, Dudley E. Waters; Secretary and Treasurer, Joseph H. Martin.

Head of the Lakes Aero Club

403 Lonsdale Building, Duluth, Minn.

President, Burt C. Hubbard; Vice-President, H. G. Pickering; Treasurer, William Turner; Secretary, Lloyd Williams.

Illinois Model Aero Club

430 South Michigan Ave., Chicago, Ill.

President, Louis Chatroop; Vice-President, Harry Wells; 2nd Vice-President, Walter L. Brock; Secretary, Robert Jaros; Corresponding Secretary, Ward Pease; Treasurer, Linn E. Davies; Contest Committee, B. Pond.

Kansas City Aero Club

Kansas City, Mo.

President, George M. Meyers; Secretary, Louis W. Shouse; Treasurer, Raymond M. Havens.

Missouri Aeronautical Society

2101 Locust St., St. Louis, Mo.

President, James W. Bemis; Vice-President, Daniel G. Taylor; Treasurer, John G. Lonsdale; Assistant Treasurer, William J. Maresh; Secretary, S. C. Buckingham.

ADVISORY BOARD

Charles Nagel, Benjamin Gratz, Peyton T. Carr, Philip B. Fouke, Judge Charles C. Allen, H. W. Eddy, W. B. Strang, John G. Lonsdale, A. B. Lambert, Chairman.

Oklahoma City Aero Club

Oklahoma City, Okla.

President, Wesley I. Nunn; Vice-President, L. D. Abney; Secretary and Treasurer, Orville Mosier.

Philadelphia Aeronautical Recreation Society

1811 N. Logan Square, Philadelphia, Pa.

President, Thomas E. Eldridge, M. D.; Vice-President, G. H. Simmerman, D.D.S.; 2nd Vice-President, Ira A. Brown; Secretary, Mrs. M. Thompson; Treasurer, Thomas Rose.

Scranton Aero Association

Lackawana Air Trail, Scranton, Pa.

President, J. S. Schlager; Vice-President, Otto Conrad; Treasurer, E. M. Kohnstamm; Secretary, J. F. Hoffman.

Southwestern Aeronautical Association

Fort Worth, Texas

President, R. E. Lee Costan; Vice-President, B. G. Leake; Secretary, J. H. Price; Treasurer, Sam. D. Triplett.

DIRECTORS

Warren V. Galbraith, W. G. Burton, Maj. C. O. Elliott, Marshall Spoons, Sam. D. Triplett, J. H. Price, R. E. Lee Costan.

Texas Model Aero Club

517 Navarro St., San Antonio, Tex.

President, Hamer T. Smith; Vice-President, Dwight E. Bourn; Secretary and Treasurer, Berkeley B. Hunter; Reporter, Edwin A. Parrish; Committees, Charles C. Gilde-meister.

Yellowstone Aero Route Association

Miles City, Mont.

President, H. B. Wiley; Secretary, W. G. Ferguson.

Yolo Fliers' Club

Woodland, Calif.

President, Arthur C. Huston; Vice-Presidents, O. W. H. Pratt and James W. Monroe; Secretary, Emil K. Kraft; Treasurer, Floyd L. Tuttle.

DIRECTORS

Arthur C. Huston, Laurence Stephens, Robert L. Nieman, O. W. H. Pratt, James W. Monroe, Harry S. Summers, Emil K. Kraft, Forrest A. Plant, T. D. Cummins, L. W. Scarlett.

AERONAUTICAL CHAMBER OF COMMERCE

501 FIFTH AVENUE

Officers

President

Grover C. Loening

President, Loening Aeronautical Engineering Co.

First Vice-President

Charles F. Redden

President, Aeromarine Airways, Inc.

Second Vice-President

C. C. Witmer

President, Airship Manufacturing Co. of America

Treasurer

B. E. Bushnell

Director of Sales, Stewart Hartshorn Co.

Secretary and General Manager

Samuel S. Bradley

Manufacturers Aircraft Association, Inc.

Asst. Secretary and Asst. Treasurer

Luther K. Bell

Board of Governors

Grover C. Loening	F. B. Rentschler
Charles F. Redden	F. H. Russell
C. C. Witmer	John M. Larsen
B. E. Bushnell	Lawrence Sperry
S. S. Bradley	Charles H. Colvin
Sherman M. Fairchild	

Class A Members

Aeromarine Plane & Motor Co.
Times Building, New York.

Airship Manufacturing Co. of America
Hammondsport, New York
Beckwith Havens

Curtiss Aeroplane & Motor Corp.,
Garden City, L. I., New York.

Dayton Wright Co.
Dayton, Ohio.
G. M. Williams

G. Elias & Bro., Inc.,
Buffalo, New York.
A. J. Elias, President.

Gallaudet Aircraft Corp.,
East Greenwich, R. I.
J. K. Robinson, Jr., President.

E. M. Laird Co.,
419 First National Bank Bldg. Wichita Kans.
Wallace

J. L. Aircraft Corp.
347 Madison Avenue, New York City.

Lawrance Aero-Engine Corp.,
644 West 44th Street, New York City.
Charles L. Lawrance, Pres.

L. W. F. Engineering Co.
College Point, L. I., N. Y.

Lewis & Vought Corp.
Review & Borden Aves., Long Island City, N. Y.

Loening Aeronautical Engineering Corp.,
351 West 52nd Street, New York City.
Grover C. Loening, President

Longren Aircraft Corp.,
Topeka, Kansas.
W. D. Wallace, Secretary

Manufacturers Aircraft Assn.,
501 Fifth Avenue, New York City.
S. S. Bradley

National Aircraft Underwriters Assn.,
13 Park Row, New York City.
Edmund Ely, President

Ordnance Engineering Corp.
Baldwin, L. I., New York.

Packard Motor Car Co.,
Detroit, Michigan.
J. G. Vincent

Thomas-Morse Aircraft Corp.,
Ithaca, New York.
F. L. Morse, President

Wright Aeronautical Corp.,
238 Lewis Street, Paterson, N. J.
F. B. Rentschler, President

Class B Members

American Bronze Corp.,
Berwyn, Pa.
R. O. Sperry, Eastern Sales Manager

American Hammered Piston Ring Co.,
Baltimore, Md.
W. C. Stettinius, Sales Manager.

B. G. Corp.,
33 Gold Street, N. Y. C.
A. J. Goldsmith

Bijur Motor Appliance Co.
243 Central Avenue, Hoboken, N. J.

A. & D. R. Black,
25 Brixton Road, Garden City, L. I., N. Y.
Archibald Black

Breswster & Co.,
Bridge Plaza, Long Island City, L. I.
Philip B. Brewster, General Sales Manager

Vincent J. Burnelli,
Amityville, L. I., New York.
V. T. Burnelli

Champion Ignition Co.,
Flint, Michigan.
Champion

Cox-Klemin Aircraft Corp.,
College Point, L. I., N. Y.
Alexander Klemin, Vice-Pres.

The Douglas Co.,
Ascot Park, Los Angeles, Calif.

Fairechild Aerial Camera Corp.,
136 West 52nd Street, New York City.
S. M. Fairechild

General Aluminum & Brass Mfg. Co.,
Detroit, Michigan.
G. G. Power, General Sales Manager.

Goodyear Tire & Rubber Co.,
Akron, Ohio.
W. C. Young.

Stewart Hartshorn Co.,
250 Fifth Avenue, New York City.
B. E. Bushnell, Director of Sales

Johnson Airplane & Supply Co.,
Dayton, Ohio.

Linde Air Products Co.

Meisel Press Mfg. Co.,
944 Dorchester Avenue,
Boston 25, Massachusetts.
O. C. Meisel, or S. A. Smith,
Manager, Gear Department

New Jersey Veneer Co.,
Lakeview, Paterson, N. J.

New York Blue Print Paper Co.,
102 Reade Street, New York City.

Park Drop Forge Co.,
Cleveland, Ohio.

Pennsylvania Hardware & Paint Co.,
107 West 56th Street, New York City.

Perry-Austen Mfg. Co.,
P. O. Rosebank, Grasmere, Staten Island.
Lewis H. Austen, Vice Pres. & Treas.

Pioneer Instrument Co.,
136 Havemeyer Street, Brooklyn, New York.
Charles H. Colvin, General Manager

Simms, Magneto Co.,
East Orange, N. J.
R. C. Anderson, Pres. & Gen. Man.

S. K. F. Industries,
165 Broadway, New York City.
Charles H. Burr, Treasurer.

Steel Products Co.,
Cleveland, Ohio.
C. E. Thompson, President

Lawrence Sperry Aircraft Corp.,
Farmingdale, L. I., New York.
Lawrence Sperry.

Stout Engineering Laboratories,
6382 Beaubien Street, Detroit, Michigan.

Valentine & Co.,
456 Fourth Avenue, New York City.
Langdon B. Valentine, Vice President

Western Brass Mfg. Works,
2007 Marshall Blvd., Chicago, Illinois.

Class C Members

Aeromarine Airways, Inc.
Times Bldg., New York City.

E. R. Armstrong, Dupont Engineering Co.,
Wilmington, Del.
Dupont Building

Harold P. Ayres, Apt. 5A, 941 E. 47th Street, Chicago, Ill.

- Frank E. Baldwin, Wright Aeronautical Corp., Paterson, N. J.
 David Beecroft, 239, West 39th Street, New York City.
 Luther K. Bell, 501 Fifth Avenue, New York.
 L. W. Bettiger, L. W. F. Engineering Co., College Point, L. I. N. Y.
 R. R. Blythe, c/o Johnson & Higgins, 49 Wall Street, N. Y. C.
 J. J. Boland, Aeromarine Plane & Motor Co., Keyport, N. J.
 George W. Brown, General Sales Manager, Curtiss Aeroplane & Motor Corp.
 H. A. Bruno, Aeromarine Airways, Inc., Times Bldg., N. Y. C.
 S. W. Bradley, 501 Fifth Avenue, N. Y. C.
 Warren C. Brown, Pioneer Aero Co., 41 Willow Avenue, Plainfield, N. J.
 John R. Cautley, Wright Aeronautical Corp., Paterson, N. J.
 Garey W. Carr, The Ace, Marsh-Strong Building, Los Angeles, Calif.
 A. J. Chalmers, Cine-Mundial, 516 Fifth Avenue, New York City.
 Albert Champion, Champion Ignition Co., Flint, Mich.
 C. E. Cheney Aero Co., Greene, Iowa.
 Roland Chilton, Keyport, N. J.
 Col. Virginius E. Clark, Dayton Wright Company, Dayton, Ohio.
 Harry Depew Copland, 12 Howland Street, Cambridge, 38, Mass.
 Henry M. Crane, 44 West 44th Street, N. Y. C.
 Curtiss Aeroplane Export Corp., 52 Vanderbilt Avenue, N. Y. C., C. W. Webster
 Fred H. Colvin, 475 Tenth Avenue, N. Y. C. (Editor, American Machinist).
 Curtiss Eastern Airplane Co., 130 S. 15th Street, Philadelphia, Pa., G. Sumner Ireland.
 Robert H. Craig, Jr., Kirkwood, Mo.
 Glenn H. Curtiss, Garden City, L. I., N. Y.
 Curtiss Metropolitan Airplane Co., 505 Fifth Avenue, N. Y. C.
 William Davis, Jr., 404-29th Street, Oakland, Calif.
 The Ralph C. Diggins Co., 140 N. Dearborn Street, Chicago, Ill.
 Donald Douglas, The Douglas Co., Ascot Park, Los Angeles, Calif.
 Easter Airways, 1403 Fidelity Bldg., Baltimore, Md., Mr. P. Ewing Easter, Pres.
 Sherman M. Fairchild, Fairchild Aerial Camera Corp., 136 W. 52nd St., N. Y. C.
 Albert H. Flint, L. W. F. Engineering Corp., College Point, L. I., N. Y.
 A. G. Flachbar, L. W. F. Engineering Co., College Point, L. I., N. Y.
 Edson F. Gallaudet, Gallaudet Aircraft Corp., East Greenwich, R. I.
 L. D. Gardner, Gardner, Moffat Co., 225 Fourth Ave., N. Y. C.
 W. L. Gilmore, Curtiss Engineering Corp., Garden City, L. I., N. Y.
 Clarence D. Hanscom, 22 Chelsea Place, East Orange, N. J.
 J. L. Harkness, L. W. F. Engineering Co., College Point, L. I., N. Y.
 Beckwith Havens, Airship Mfg. Co. of America, Hammondsport, N. Y.
 William Henry, The Douglas Co., Ascot Park, Los Angeles, Calif.
 George H. Houston, 60 Broadway, New York City.
 Huff Daland Aero Corp., Ogdensburg, N. Y., A. E. Johnston.
 G. Sumner Ireland, Curtiss Eastern Airplane Co., 130 S. 15th St., Phila., Pa.
 Temple N. Joyce, 709 Equitable Bldg., Baltimore, Md.
 W. Wallace Kellett, 717 Widener Bldg., Philadelphia, Pa.
 Kelso Aviation Co., Lewiston, Idaho, Box 198 (Mr. Floyd L. Kelso)
 W. A. Kidder, Curtiss Northwest Airplane Co., 707 Metropolitan Bk. Bldg., Minneapolis, Minnesota.
 C. F. Kettering, General Motors Corp., Dayton, Ohio.
 C. Roy Keys, Curtiss Aeroplane & Motor Corp., Garden City, L. I., N. Y.
 William Klein, 839 Post Street, San Francisco, Calif.
 Alexander Klemin, Cox-Klemin Aircraft Corp., College Point, L. I., N. Y.
 Herman T. Kraft, Goodyear Tire & Rubber Co., Akron, Ohio.
 H. L. Lambert, (Lamberton) Ellenboro, W. Va.
 W. B. Leberherz, Gallaudet Aircraft Corp., East Greenwich, R. I.
 Albert P. Loening, Loening Aeronautical Engineering Corp., 351 W. 52nd St., N. Y. C.
 Grover C. Loening, Loening Aeronautical Engineering Corp., 351 W. 52nd St., N. Y. C.
 Charles L. Lawrance, Lawrance Aero Engine Corp., 644 W. 44th St., N. Y. C.
 Robert W. Lowell, General Delivery, Elyria, Ohio.
 Charles M. Manly, 250 West 54th Street, N. Y. C.
 Hamilton Maxwell, 141 W. 33rd Street, N. Y. C.
 George Mead, Wright Aeronautical Corp., Paterson, N. J.
 F. L. Morse, Thomas-Morse Aircraft Corp., Ithaca, N. Y.
 Robert B. C. Noorduyn, Netherlands Aircraft Mfg. Co., 286 Fifth Ave., N. Y. C.
 Ladislav d'Orey, Aviation, 225 Fourth Avenue, New York City.
 C. G. Peterson, Wright Aeronautical Corp., Paterson, N. J.
 Stephen H. Philbin, 5 Nassau Street, New York City.
 H. L. Pope, Wright Aeronautical Corp., Paterson, N. J.
 Otto Praeger, Grand Central Terminal Bldg., N. Y. C.
 J. F. Prince, Wright Aeronautical Corp., Paterson, N. J.
 Herman B. Ring, Lawrance Aero-Engine Corp., 644 W. 44th St., N. Y. C.
 C. F. Redden, Aeromarine Airways, Inc., Times Bldg., N. Y. C.
 H. J. Reilly, American Army and Navy Journal, 20 Vesey St., N. Y. C.
 F. B. Rentschler, Wright Aeronautical Corp., Paterson, N. J.
 Robertson Aircraft Corp., 5247 Oakland Avenue, St. Louis, Mo.
 J. K. Robinson, Jr., Gallaudet Aircraft Corp., 522 Fifth Avenue, N. Y. C.
 John M. Rogers, Wright Aeronautical Corp., Paterson, N. J.
 Foster Russell Aviation Co., Spokane, Washington.
 Frank H. Russell, The Rochambeau, Washington, D. C.
 R. W. Schroeder, Underwriters' Laboratories, Inc., 207 E. Ohio St., Chicago, Ill.
 L. R. Seidell, 80 Washington Street, N. Y. C. (N. Y. Testing Laboratories).
 A. R. Small, Underwriters' Laboratories, Inc., 207 E. Ohio St., Chicago, Ill.
 Daisy Smith, Spokane, Wash.
 Southwest Airplane Co., 801 New Wright Bldg., Tulsa, Oklahoma.
 Lawrence Sperry, Lawrence Sperry Aircraft Corp., Farmingdale, L. I., N. Y.
 Wm. B. Stout, Stout Engineering Laboratories, 6282 Beau-bien St., Detroit, Mich.
 H. E. Talbott, Dayton Wright Co., Dayton, Ohio.
 J. P. Tarbox, Curtiss Engineering Corp., Garden City, L. I., N. Y.
 Robert G. Thach, 120 Broadway, N. Y. C.
 Triangle Airways, Inc., 2229 S. Michigan Ave., Chicago, Illinois.
 I. M. Uppercu, 1881 Broadway, N. Y. C.
 Ralph H. Upson, 225 Fourth Avenue, c/o Gardner Moffat Co., N. Y. C.
 U. S. Air Service Magazine, Earl N. Findlay, Editor, Star Bldg., Washington, D. C.
 Adrian Van Muffling, Van Muffling & Marx, 299 Madison Ave., N. Y. C.
 Earl T. Vance, Miles City, Montana, (Aero Miles City Club).
 J. G. Vincent, Packard Motor Car Co., Detroit, Mich.
 Harry Vissering, "Luftschiffbau-Zeppelin" 14 E. Jackson Blvd., Chicago, Ill.
 Chance M. Vought, Lewis & Vought Corp., Review & Borden Aves., Long Island City.
 G. Douglas Wardrop, Aerial Age Weekly, 280 Madison Ave., N. Y. C.
 George S. Wheat, 1 West 34th Street, N. Y. C.
 G. M. Williams, Dayton Wright Co., Dayton, Ohio.
 C. C. Witmer, Airship Mfg. Co. of America, Hammondsport, N. Y.
 Orville Wright, Dayton, Ohio.
 Lt. John Perry Wood, 2620, Main Street, Buffalo, N. Y.
 W. W. Wyman, C. L. Maguire Petroleum Co., Chicago, Ill.
 W. C. Young, Goodyear Tire Rubber Co., Akron, Ohio.
 Paul Zimmerman, Aeromarine Plane & Motor Co., Keyport, N. J.

MANUFACTURERS AIRCRAFT ASSOCIATION

501 FIFTH AVENUE

Officers

President

Mr. J. K. Robinson, Jr.

Vice President

Mr. G. M. Williams

Treasurer

Mr. F. B. Rentschler

Secretary

Mr. F. H. Russell

General Manager & Assistant Treasurer

Mr. S. S. Bradley

Directors

Mr. A. H. Flint—L.W.F. Engineering Co., College Point, L. I.
 Mr. I. M. Uppercue—Aeromarine Plane & Motor Co., Keyport, N. J.
 Mr. Glenn L. Martin—Glenn L. Martin Co., Cleveland O.
 Mr. F. L. Morse—Thomas Morse Aircraft Corp., Ithaca, N. Y.
 Col. J. G. Vincent—Packard Motor Co., Detroit, Mich.

Members

Aeromarine Plane & Motor Co., Keyport, N. J.—Times Bldg., N. Y. City.
 Boeing Airplane Co., Georgetown Station—Seattle, Wash.
 Burgess Co., Garden City, L. I., New York.
 Curtiss Aeroplane & Motor Corp., Garden City, L. I., N. Y.
 Curtiss Engineering Corp., Garden City, L. I., N. Y.
 Dayton Wright Co., Dayton, O.
 Gallaudet Aircraft Corp., East Greenwich, R. I.—522 Fifth Ave., N. Y.
 Fisher Body Corp., Detroit, Mich.
 Glenn L. Martin Co., Cleveland, O.
 L.W.F. Engineering Co., College Point, L. I., N. Y.
 Packard Motor Car Co., Detroit, Mich.
 Sturtevant Aeroplane Co., Hyde Park District, Boston, Mass.
 Thomas-Morse Aircraft Corp., Ithaca, N. Y.
 West Virginia Aircraft Co., Wheeling, W. Va.
 Wright Aeronautical Corp., 238 Lewis St., Paterson, N. J.
 G. Elias & Bros., Inc., Buffalo, N. Y.

NATIONAL AIRCRAFT UNDERWRITERS ASSOCIATION

EXECUTIVE OFFICE 120 WEST 42ND ST., NEW YORK

President

Edmund Ely
(Aetna Life Ins. Co.)

Sec. & Treas.

E. Stockton Martin
(Home Insurance Co.)

Manager

Ambrose Ryder
(National Workmens
Compensation Bureau)

ACTIVE MEMBERS

Edmund Ely, Pres.
 E. S. Martin, Sec. & Treas.
 J. D. Lester
 Aetna Life Ins. Company
 Home Insurance Company
 Globe & Rutgers Ins. Co.

ASSOCIATE MEMBERS

T. A. KRUSE	Appleton and Cox, Inc.
M. BALLARD	Commercial Union Assurance Company
MANTON MAVERICK	Continental Casualty Company
R. M. STAKER	Employers Indemnity Corp.
C. S. TIMBERLAKE	Hartford Fire Insurance Co.
J. M. WENNSTROM	Hudson Insurance Company
BENJ. RUSH	Insurance Co. of North America
H. E. FEER	Int'l Fire and Marine Agency Corp.
T. A. WEED	Liverpool, London & Globe Ins. Co.
J. V. FOTHERGILL	London and Lancashire Fire Ins. Co.
F. HIGHLANDS BURNS	Maryland Casualty Co.
A. B. REILEY	Mutual Life Insurance Co.
W. S. MAYS	Niagara Fire Insurance Company
C. B. GUNN	North British and Mercantile Ins. Co.
F. L. HOFFMAN	Prudential Life Ins. Co.
T. F. JENNINGS	Royal Indemnity Company
ALFRED G. MARTIN	The Northern Assurance Co., Ltd.
C. G. WHIPPLE	Union Central Life Insurance Co.
A. W. COLLINS	Zurich Gen. Acc. and Liab. Ins. Co.

UNDERWRITERS' LABORATORIES

(Classification of Pilots, Licenses, etc.)

207 EAST OHIO ST., CHICAGO, ILL.

A. R. Small

R. W. Schroeder

STATE AND MUNICIPAL AVIATION COMMISSIONS

Ohio State Aviation Commission

Capt. E. V. Rickenbacker	C. F. Kettering, Dayton
John R. Gameter, Akron, O.	H. E. Talbot, Jr., "
Co. Frank Hunter, Columbus	Col. E. A. Deeds, "
	Rex. L. Uden, Cleveland

New York State Aviation Commission

Col. Jefferson DeMont Thompson	Alan R. Hawley
Henry Beaumont Herts	Frederick H. Allen
Frank S. Voss	Chauncey D. Hakes
Robert Graves	Augustus Post

Maryland State Aviation Commission

Capt. Temple Joyce	Dr. Joseph A. Ames
W. Frank Roberts	Garland Powell
Wm. D. Tipton, Baltimore	J. Fletcher Rolph Centreville

Connecticut Aviation Commission

Judge Wm. J. Malone, Hartford, Conn.

Chicago Air Board

Bion J. Arnold	C. B. Amorous
Guy Guernsey	Chas W. Folds
George B. Foster	Maj. William C. McChord
	R. W. Schroeder, (hon.)

Oregon State Board of Aeronautics

W. E. Lees	L. B. Hickam
A. F. Roth	L. G. DeVany
	F. Hart

AVIATION

Service to the entire aeronautical community has always been the main purpose of AVIATION: Service to the research man, the designer and engineer through original technical contributions and reliable information on new developments in aerodynamics and airplane construction; service to the civil flier through the periodical listing of new landing facilities, flying routes, etc. and the reporting of new navigation instruments, new methods of navigation, etc.; service to commercial aviation companies by means of trustworthy reports of the organization and practical experience gained by European air transport enterprises and by advocacy of federal air legislation; finally service to Military and Naval Aviation by means of discussion of their requirements in the matter of National Defense.

How well AVIATION has succeeded in this task is indicated by the general esteem in which it is held in all parts of the world and by the support it has received in this country from those most qualified to speak for American Aeronautics.

But beside these varied services which it has aimed to render the aeronautical community, AVIATION has from the first been characterized by still another feature, not generally found in other aeronautical publications; the independence of its editorial policy. Whatever the subject, AVIATION has displayed in its treatment an independence of views which was prompted solely by the desire to put forward constructive criticism. In doing this AVIATION has not only taken the initiative on many subjects but has reflected the best views of the leaders of American Aeronautics, and in this capacity has exerted considerable influence in the shaping of our aeronautical policy. Steadfast advocacy of federal air legislation and of a government agency for its enforcement is perhaps the most striking among the numerous proofs of the farsightedness of its editorial opinion.

No one desirous of keeping abreast with the constant advance of aeronautics, scientific as well as commercial and military, can do so with certainty without reading AVIATION every week.

WHO'S WHO IN AMERICAN AERONAUTICS

Evers Abbey

ABBEY, EVERS, 1st Lieut., Air Service; born, Hartford, Conn., Feb. 1, 1895; son of Herbert Clifton Abbey and Mary E. Abbey.

Educated: Public and high schools of New York City; 1914-1916, New York University, M. E.

Professional: 1916-1917, Assistant Director, motion pictures.

Aeronautical Activities: School of Aerial Photography, Fort Sill, Okla., 1917-1918; School of Aerial Photography, Cornell University, 1918; C.O. Aerial Photo Sec. No. 31, 1918; C.O. Aerial Photo Sec. No. 39, 1919; Border Patrol 1919-1921; C.O. 1st Photographic Section, 1919-1920; Aerial Mapping Detachment 1920; C.O. 2nd Photographic Section, 1921; School of Aerial Photography to date.

Flying Rating: Aerial Observer, Sept. 1918; Reserve Military Aviator, May 1919; Airplane Pilot, 1920.

War Service: As above.

Present Occupation: 1st Lieut., Air Service. *Address:* Langley Field, Va.; home, 316 West 102 St., New York City.

Henry Abbey Jr.

ABBEY, HENRY, JR., Commanding Officer, Mitchel Field; born, Lockport, N. Y., Sept. 13, 1887; son of Henry Abbey and Rebekah (Connelly) Abbey; married, Lucretia Miller, May 5, 1914.

Educated: Boys' Country School and Boys' Latin School, Baltimore, Md., Princeton University.

Aeronautical Activities: Student Pilot, Rockwell Field; Pursuit Training, Gerstner Field, April 1918; Officer in Charge of Flying, Chanute Field to Oct. 1918; Commanding Officer, Scott Field to Nov. 1919; Commanding Officer, 5th Aero Squadron to May 1921; Commanding Officer, Mitchel Field to date.

Flying Rating: Junior Military Aviator, Dec. 13, 1917.

War Service: 11th Cavalry, Aug. 1910 to Oct. 1913; 10th Cavalry, 1913 to 1917; Major, Air Service, 1920.

Member: Aero Club of America.

Present Occupation: Commanding Officer, Mitchel Field.

Address: Mitchel Field, Long Island, N. Y.

Edwin DeWitt Ackerman

ACKERMAN, EDWIN DEWITT, Glue Expert; born, New York State, April 25, 1874; son of Alfred S. Ackerman and Mary A. (Terpening) Ackerman.

Educated: High School; M.A., Eastman College, 1893.

Professional: Salesman, newspaperman, sales manager, 1893-1910; manufacturer of "Ackerman" pianos and player-pianos, "Lyrtone" phonographs, 1910 to Aug. 1917; General Manager, Waterproof Adhesives Co., June 1919 to date.

Aeronautical Activities: Assistant to Chief, Propeller Section; Bureau of Aircraft Production, June 15, 1918 to July 14, 1918; Chief, Plywood and Glue Section, Bureau of Aircraft Production, July 14, 1918 to May 5, 1919.

War Service: 2nd O.R.T.C., Plattsburg, N. Y., Aug. 23 to Nov. 27, 1917; 1st Lieut. A.S., Feb. 13, 1918 to May 5, 1919.

Books: Water Resistant Glue—Its Production, Method of Mixing and Use.

Member: Army and Navy Air Service Association; American Legion.

Present Occupation: General Manager, Waterproof Adhesives Co.

Address: Rosendale, Ulster Co., New York.

Porter Hartwell Adams

ADAMS, PORTER HARTWELL, Experimental Engineer; born, Andover, Mass., Aug. 10, 1894; son of Charles A. Adams and Jeannie H. (Porter) Adams.

Educated: Clark School, Pasadena, Calif.; Chauncey Hall School, Boston, Mass.; University of Redlands (Calif.); Mass. Inst. of Tech.

Professional: Engineer and General Manager, Basle—Adams Engineering Co., Boston, Mass. from 1916 until beginning of the World War; assistant to Warren Noble, N. C. L. Engineering Corp., 1919-1920.

Aeronautical Activities: Special work for Connecticut Aircraft Co. and Cooper Aircraft Co., 1915; flying, 1916 in Los Angeles, Calif., special work with D. W. Douglas; Consulting Engineer, American Aerial Corp., Boston, Mass., working on large type passenger ships for Boston-New York service, 1920-1921.

War Service: Ensign, U. S. Naval Reserve; in charge of Office of Naval Intelligence, Rock-

land, Me., 1917-1918; Aide to the Commandant, U. S. Naval Air Station, Chatham, Mass., 1918-1919.

Member: Junior A. S. M. E.; Junior member, Society of Automotive Engineers; Engineer's Club of Boston; Aero Club of America (N. Y.); Providence Engineering Society; U.S.N.R. Officer's Assn.; Economic Club of Boston; Boston Chamber of Commerce; Technology Club of R. I.

Present Occupation: Technical and Industrial Banking; Experimental Engineering.

Address: 1352 Beacon St.; home, 2 Commonwealth Ave., Boston, Mass.

Mart H. Adams

ADAMS, MART H., Commercial Aviation; born, Hartville, Mo., Dec. 2, 1888; son of William P. Adams and Sadie Adams; married, Edna Russell Vance, June 20, 1915.

Educated: Public schools of Logan County, Okla.

Professional: Telegraph operator, 1905-1906; 1906-1909, Railway business, Salesman, Sales Manager, 1909 to 1916; Coal business, oil business, 1916-1917; manufacturing, 1918 to 1920.

Aeronautical Activities: First airplane distributor in Oklahoma; first owner of public airplane hangar and field in Oklahoma.

Present Occupation: Airplane distributor, Southwest.

Address: 117 West 2nd St.; home, 1224 N. Robinson St., Oklahoma City, Okla.



A. Livingston Allan

Claude L. Airhart

AIRHART, CLAUDE L., Airship engineer; born, Advance, Ind., 1893; son of Cornelius Laird Airhart and Adda May (Canine) Airhart.

Educated: High School.

Professional: Lumber business, 1910-1912; electric power station operation, 1912-1916.

Aeronautical Activities: Enlisted Dec. 10, 1916, A.S., S.C.; on flying status from Jan. 1919 to March 1920, lighter-than-air.

Member: B.P.O.E.; Airship Engineering Society, McCook Field; American Legion.

Present Occupation: Field Test Mechanician (Airship Engineer).

Address: McCook Field, Dayton, Ohio; No. 133 Bellview Apts., Dayton, Ohio.

Harry Starkey Aldrich

ALDRICH, HARRY STARKEY; 1st Lieut. C.A.C., U.S.A.; born, Kalamazoo, Mich., May 17, 1895; son of Byron Aldrich and Louise (Starkey) Aldrich; married, Keitha Bolles, Feb. 2, 1918.

Educated: Detroit Central High School; B. B., E. M., Aug. 1917, Michigan College of Mines, Houghton, Mich.

Aeronautical Activities: 1917, Ground School, Columbus, Ohio; Rockwell Field, San Diego, Calif.; passed R. M. A. tests and commissioned;

arrived, France, March 1918; sent to Issoudun for advanced training; June 1918, 1st Aero Squadron as pilot; at front until Sept. 1918.

Flying Rating: Reserve Military Aviator, Feb. 1, 1918.

War Service: May 5, 1917 to June 12, 1919 in army; Wounded and shot down on fire over Thiencourt, Sept. 12, 1918.

War Honors: Croix de Guerre, given for an unusually difficult photographic mission executed, Aug. 11, 1918, during Aisne-Marne offensive.

Address: Fort Rosecrans, San Diego, Calif.

Edwin Eugene Aldrin

ALDRIN, EDWIN EUGENE, 1st Lieut., Air Service; born, Worcester, Mass., April 12, 1896; son of Carl John Aldrin and Anna (Nelson) Aldrin.

Educated: Public schools; A.B. 1915, Clark University; Worcester Polytechnic Institute, Graduate Student, 1916; Master's Degree (S.M.) 1917, Mass. Inst. of Tech.

Aeronautical Activities: Aeronautical Engineering, M.I.T., 1916; instructor wind tunnel work for N.A.C.A., 1917; instructor, Army and Navy School of Aeronautical Engineering at M. I. T., 1918; Assistant Chief, Airplane Section, later Chief, School Section Engineering Division, Air Service, McCook Field, 1919 to date.

Flying Rating: Airplane Pilot, Sept. 1919.

War Service: As above.

Member: Secretary, Aeronautical Division, American Society of Mechanical Engineers; Society of Automotive Engineers.

Present Occupation: 1st Lieut., Air Service.

Address: c/o Air Officer, U. S. Army, Manila, Philippine Islands; home, 95 Downing St., Worcester, Mass.

Richard Aldworth

ALDWORTH, RICHARD, 1st Lieut., Air Service; born, Augusta, Ga., Oct. 1, 1897; son of Thomas Aldworth and Agnes (Quinn) Aldworth.

Educated: Private schools; two years, St. Mary's College; two years, Jesuit College.

Aeronautical Activities: Flew in Italy, Feb. to May 1918; France, Feb. to Nov. 1918; Germany, May to July 1919; Kelly Field, Dec. 1919 to date.

Flying Rating: Airplane Pilot.

War Service: Army, May 1917 to date.

War Honors: Citation by Army Air Service Commander First Army.

Present Occupation: 1st Lieut., Air Service.

Address: 315 W. Poplar Street, San Antonio, Tex.

A. Livingston Allan

ALLAN, A. LIVINGSTON, Commercial Aviation; born, Bayonne, N. J., Dec. 20, 1886; son of William George Allan and Nellie (Hancox) Allan; married, Hazel Nelson, June 17, 1917.

Educated: Bayonne High School.

Aeronautical Activities: Graduated Curtiss Flying School, Hammondsport, N. Y., early in 1915; taught flying in England, Dec. 1915 to June 1916; Chief Civilian Flying Instructor, Air Service, U. S. Army, Arg. 1916 to Dec. 1918; Pilot for Curtiss Aero & Motor Corp. from March 1919 to date.

Flying Rating: Aero Club License, Seaplane, No. 42, Expert Land Certificate No. 67.

War Service: 2nd Lt. R.F.C., 1915-1916; Chief Civilian Flying Instructor, Air Service, U. S. Army, Aug. 1916 to Dec. 1918.

Member: Aero Club of America.

Present Occupation: Manager and Pilot, Curtiss Flying Station, Atlantic City, N. J.

Address: Curtiss Flying Station; home, Hollywood Apts., Atlantic City, N. J.

Bridger Bailey Allen

ALLEN, BRIDGER BAILEY, Prosecuting Attorney; born, Sardis, Miss., April 3, 1891; son of A. J. Allen and Mary (Bridger) Allen.

Educated: High school; Miss. Heights Academy; West Tennessee State Normal; University of Memphis Law School.

Professional: 1916, Admitted to Bar; practiced law in Sunflower County, Miss. until May 1917, Jan. 1919 to date.

Aeronautical Activities: Ground School, Urbana, Ill., March 1918; training at Scott Field and Ellington Field.

Member: Aero Club of America.

Present Occupation: Prosecuting Attorney for Sunflower County, Miss.

Address: Moorhead, Miss.

Harris Campbell Allen

ALLEN, HARRIS CAMPBELL, Architect; born, Rutland, Vt., Nov. 22, 1876; son of Charles L. Allen and Gertrude (Lyon) Allen.

Educated: Oakland High School, Oakland, Calif.; B.A. 1897, Stanford University.

Professional: Architectural Draftsman, 1897-1908; architect, 1908-1917, 1919 to date; editor, "Building Review", 1916-1917, 1919 to date.

Aeronautical Activities: President, Aviation Examining Board, Kansas City, Nov. 1917 to March 1918; head of Dept. Aerial Reconnaissance, School for Aerial Observers, Post Field, March 1918 to March 1919; Chairman, Aeronautics Committee, American Legion, Dept. of California, 1919-1921; Chairman, Aeronautics Committee, Oakland Chamber of Commerce, 1920-1921; Vice President, Allied Fliers Club, 1921.

War Service: Captain A.S., Oct. 1917 to March 1919.

Member: American Legion; Sons of the American Revolution; Allied Fliers Club; American Inst. of Architects; Air Service Assn.; Phi Kappa Psi; A.O.N.M.S.; Bohemian Club; Progressive Club.

Present Occupation: Architect and Editor of The Building Review.

Address: Central Bank Bldg., Oakland, Calif.; home, 2514 Hillegass Ave., Berkeley, Calif.

Edmund Turney Allen

ALLEN, EDMUND TURNEY, Student; born, Chicago, Ill., Jan. 4, 1896; son of Edmund T. Allen and Abby D. Allen.

Educated: Chicago High School; University of Illinois; Mass. Inst. of Tech.

Aeronautical Activities: Ground School at U. of Ill.; primary training at Scott Field; advanced training at Gerstner Field; acrobatic instructor at Love Field; Martlesham Heath, England on special mission for Technical Section; Major Schroeder's Test Squadron, Dayton, Jan. 1919; Langley Field on Special duty to Aug. 1919; National Advisory Comm. Test Pilot, 1919 and 1920.

Flying Rating: Reserve Military Aviator.

Member: Aero Club of America.

Present Occupation: Student of Aeronautical Engineering at M.I.T.

Address: 99 Brattle St., Cambridge, Mass.

Columbus Delano Ames

AMES, COLUMBUS DELANO, Life Insurance; born, Baltimore, Md., Oct. 5, 1893; son of Delano Ames and Adeline (Gibbs) Ames; married, Carolyn H. McCay, Jan. 17, 1920.

Educated: Cheshire School, Cheshire, Conn.; A.B. 1914, Williams College; Post Graduate work Johns Hopkins University.

Professional: Attache, American Embassy, Rome, Italy, 1915-1916; Manager, Foreign Affairs, News Service, Washington, 1919-1920; Manager, Green, Lucas, Gunts, and French, Baltimore, Md. 1921; Agent New England Mutual Life Insurance Co.

Aeronautical Activities: Aerial Gunnery School, Cazaux, France, Sept.-Oct. 1918; gunnery school, St. Jean de Monts; bombing school, Clermont-Ferrand, France; 163rd Aero Squadron, 2nd Day Bombardment Group, A.E.F.

Flying Rating: Day Bombardment Observer.

War Service: Same as above; 19 months in A.E.F.

Member: St. Anthony Club, New York; Baltimore Club; Baltimore Country Club; Baltimore Athletic Club.

Present Occupation: Life Insurance.

Address: 500 Continental Bldg.; home, Calvert Court, Apts., Baltimore, Md.

Joseph Sweetman Ames

AMES, JOSEPH SWEETMAN, Professor of Physics; born, Manchester, Vermont, July 3,

1864; son of Dr. George Lapham Ames and Elizabeth Laura (Bacon) Ames; married Mary Boykin Williams, Sept. 14, 1899.

Educated: Shattuck School, Faribault, Minnesota; A.B. 1886; Ph.D. 1890; Johns Hopkins University, L. L. D. 1907, Washington College.

Professional: Professor of Physics and Director of Physical Laboratory, Johns Hopkins University.

Aeronautical Activities: member, National Advisory Committee for Aeronautics since its formation and chairman of its executive committee, 1920-1922; Chairman special Scientific mission to France and England, 1917.

Books: "Theory of Physics", 1897; "Manual of Experiments in Physics", 1898; "Elements of Physics", 1900; "Free Expansion of Gases", 1898; "Prismatic and Diffraction Spectra", 1898; "Induction of Electric Currents" (2 vols.), 1900; "Text-Book of General Physics", 1904; "The Constitution of Matter", 1913.

Member: Royal Instn. Great Britain, French Physical Society; National Academy Sciences, Am. Philos. Society, Am. Physical Society, Am. Acad. Arts and Sciences.

Present Occupation: Professor of Physics, Johns Hopkins University.

Address: Johns Hopkins University; home, Charicote Place, Guilford, Baltimore, Md.

Theodore Gordon Ames

AMES, THEODORE GORDON, Student, born, St. Paul, Minn., Aug. 12, 1898; son of Charles W. Ames and Mary (Lesley) Ames.

Educated: Irving School, St. Paul; St. Paul Academy (Private); A. B. 1920, Harvard College.

Aeronautical Activities: Commissioned 2nd Lieut., Air Service, N. A. with R. M. A. rating at Kelly Field No. 2, May 1918; completed Pursuit Pilot's course at Rockwell Field (including aerial gunnery training) Oct. 31, 1918; Garden City, L. I., N. Y. at time of Armistice.

Flying Rating: Reserve Military Aviator, May 1918.

War Service: Oct. 1917 to Dec. 1918.

Member: Aero Club of America; Harvard Aeronautical Society.

Present Occupation: Student.

Address: 896 Harvard St., Cambridge, Mass.; home, 501 Grand Ave., St. Paul, Minn.

John Williams Andrews

ANDREWS, JOHN WILLIAMS, Journalist; born, Bryn Mawr, Pa., Nov. 10, 1898; son of Charles McLean Andrews and Evangeline (Walker) Andrews.

Educated: Taft School, Watertown, Conn.; B. A. 1920, Yale University.

Professional: Journalism, June 1920 to date.

Aeronautical Activities: School of Military Aeronautics, M. I. T., June 1918; transferred to Cornell Ground School on Sept. 7, 1918; Camp Dick, Concentration Camp; volunteered as fighting observer, Oct. 16, 1918; went to Selfridge Field; commissioned as Reserve Officer, Dec. 17, 1918.

Flying Rating: Fighting Observer.

Present Occupation: Journalism.

Address: Asia Banking Corp., Peking, China; home, 424 St. Ronan Street, New Haven, Conn.

Leland S. Andrews

ANDREWS, LELAND S., 1st Lieut., Air Service; born Napoleon, Mich., Sept. 3, 1893; son of Fred M. Andrews and Mana S. Andrews.

Educated: Napoleon High School; Commercial Department, Ferris Institute, Aug. 1912.

Professional: Bookkeeper, Sept. 1912 to Dec. 1914; automobile salesman, 1915 to 1916.

Aeronautical Activities: Training, Jan. 1918 to May 1918; Pursuit Combat and Aerial Gunnery Instructor, June 1918 to July 1919; Pilot on Mexican Border Patrol, Aug. 1919 to March 1921; Engineer Officer and Test Pilot, Provisional Air Park Group, Kelly Field, March 1921 to May 1921.

Flying Rating: Reserve Military Aviator, May 3, 1918.

War Service: July 1917 to date.

Present Occupation: 1st Lieut., Air Service.

Address: Napoleon, Mich.

Clarence George Andrus

ANDRUS, CLARENCE GEORGE, Aerological Meteorologist; born, Meriden, Conn., June 19, 1894; son of Frank G. Andrus and Helen A. (Smith) Andrus.

Educated: Public and high schools of Meriden, Conn.

Professional: U. S. Weather Bureau 1914-1921.

Aeronautical Activities: Aerological study with kites and pilot-balloons, 1919-1921; aide in winning balloon, National Balloon Race, 1921; aide in 3rd place balloon, International Balloon Race, 1921.

War Service: Aerologist, U. S. Naval Air Service, Ireland and England, March 1918 to March 1919.

Member: American Meteorological Society.

Present Occupation: Aerological Meteorologist.

Address: Weather Bureau, Due West, S. C.



Henry H. Arnold

Glenn D. Angle

ANGLE, GLENN D., Aeronautical Engineer; born, Imlay City, Mich., Jan. 5, 1891; son of Vernon E. Angle and Mary Edith Angle; married, Eleanor B. Grantham, Sept. 6, 1916.

Educated: Imlay City and Pontiac, Mich. grammar schools; Pontiac High School; University of Michigan.

Professional: Chief draftsman, Welch Motor Car Co.; draftsman and designer, Oakland Motor Car Co., 1913-1914; Chief Eng., Dort Motor Car Co., 1914-1915; experimental engineer, Thermo Vacuum Systems, 1915-1916; engine designer, Curtiss Aeroplane and Motor Corp., Buffalo, 1917; Engineering Division, Air Service, 1917 to date.

Aeronautical Activities: Assisted in the design of the Curtiss K-12 engines; supervised the design of the Universal Test Engine, Model W-1-A 750 hp. engine and W-2 1000 hp. engine.

Books: Airplane Engine Encyclopedia.

Member: Engineers Club of Dayton; Dayton City Club.

Present Occupation: In charge of Airplane Engine Design, Engineering Division, Air Service.

Address: McCook Field; home, 238 Delaware Ave., Dayton, Ohio.

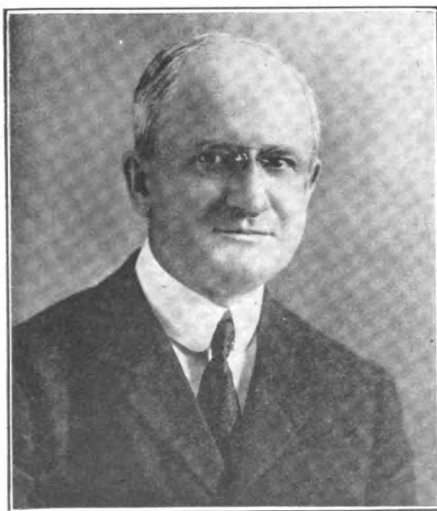
Henry H. Arnold

ARNOLD, HENRY H., Major, Air Service; born, Gladwyne, Pa., June 25, 1886; son of Dr. H. A. Arnold and Louisa H. Arnold; married, Eleanor A. Pool, Sept. 10, 1913.

Educated: Ardmore Grammar School; Ardmore High School; U. S. Military Academy.

Professional: Topographic survey, Philippine Islands, Dec. 1907 to June 1909; 2nd Lieut., 29th Infantry, June 1907 to April 1911, stationed at Philippine Islands and Governor's Island, N. Y.; 1st Lieut., 9th Infantry, Ft. Thomas, Ky., Sept. 1913 to Nov. 1913; 1st Lieut., 13th Infantry, Dec. 1913 to Jan. 1916; 1st Lieut., 3rd Infantry, Jan. 1916 to May 1916; student, Wright Aviation School, Dayton, Ohio, April 1911 to June 1911; pilot and instructor, Signal Corps Aviation School, College Park, Md., June 1911 to Nov. 1911; Supply Officer and Instructor, Signal Corps Aviation School, Augusta, Ga., Nov. 1911-May 1912; Supply Officer and Instructor, S. C. Aviation School, College Park, Md., May 1912 to Sept. 1912.

Aeronautical Activities: Contestant, Aviation Meet, Nassau Blvd., L. I., Sept. 1911; contestant, Aviation Meet, Salem, N. H., Oct. 1911; observing artillery fire using radio from airplanes for this purpose for first time, Ft. Riley, Kans., Sept. 1912 to Nov. 1912; flew first tractor in U. S. Air Service, July 1912; on duty office Chief Signal Officer in connection with aeronautics, Dec. 1912 to Sept. 1913; Supply Officer, Signal Corps Aviation School, San Diego, Calif., May 1916 to Feb. 1917; commanded and organized, Aviation Service, Panama Canal Zone, Feb. to April 1917; in charge Information Section, Aviation Division S. C., Washington, D. C., April to July 1917; Asst. Executive, Air Division, Washington, D. C., July to Oct. 1917; Executive Officer, Air Division, Oct. 1917 to March 1918; Asst. Director Military Aeronautics May 22 to Nov. 13, 1918; inspection tour in Europe, Sept. to Dec. 1918; Dist. Superintendent, Western Dist., Jan. 1919 to March 1919; C.O., Rockwell Field, March to May 1919; Dept. Air Service Officer, May 1919 to Aug. 1920; Air Officer, 9th Corps Area, Sept. 1, 1920 to date.



Joseph S. Ames

Flying Rating: Military Aviator (original), June 5, 1912; Junior Military Aviator, May 20, 1916; Military Aviator, May 20, 1919.

Member: Army and Navy Club (Wash.); Bohemian Club, San Francisco, Calif.; Los Angeles Athletic Club.

Present Occupation: Air Officer, 9th Corps Area.

Address: Santa Fe Bldg., Room 506; home, 251 East Terrace Presidio, San Francisco, Calif.

Leslie P. Arnold

ARNOLD, LESLIE P., 1st Lieut., Air Service; born, New Haven, Conn., Aug. 28, 1893; son of Frank L. Arnold and Cora L. Arnold.

Education: Public schools of Connecticut.

Professional: Submarine designer, 1914-1917.

Aeronautical Activities: Trained in U. S.; course at Issoudun, France; Army Occupation with 1st Aero Squadron until July 1919; testing at Aberdeen Proving Ground, Md., 1920; ferrying Martin Bombers, Cleveland to Langley Field, 1921.

Flying Rating: Airplane Pilot, April 26, 1918.

Present Occupation: 1st Lieut., Air Service.

Address: 19 Brooks Street, New London, Conn.

Bert Milton Atkinson

ATKINSON, BERT MILTON, Major, Air Service; born, Newman, Ga., March 20, 1889; son of Wm. Atkinson and Susie (Milton) Atkinson; married, Helen Engel, July 27, 1917.

Education: Public schools, Newman, Ga.; Georgia Military College; University of Georgia.

Professional: Commissioned 2nd Lieut., Infantry, February 11, 1911, assigned 5th Infantry; transferred to 15th Infantry, Aug. 1918; transferred to Air Service, June 5, 1916.

Aeronautical Activities: Student, Signal Corps Aviation School, San Diego, Calif., Oct. 17, 1915 to June 1, 1916; 1st Aero Squadron in Mexico June 1, 1916 to Dec. 1916; Commanding 4th Aero Squadron, March 1917 to Sept. 1917; organizing and commanding 1st Pursuit Group (94th, 95th, 27th, 147th, Squadrons), June 1918 to Aug. 1918; Commanding 1st Pursuit Wing, 2nd Pursuit Group, 3rd Pursuit Group, 1st Day Bombardment Group, Aug. 21, 1918 to Dec. 1918; Commanding Air Activities, Long Island, Feb. 1919 to April 1919; Air Officer, Hawaiian Dept., June 1919 to Jan. 1920; Commanding Mather Field, Aug. 20, 1920 to date.

Flying Rating: Junior Military Aviator; Military Aviator; Expert Certificate No. 64, Aero Club of America.

War Honors: Legion of Honor (French); Croix de Guerre; Army Citation (French).

Present Occupation: Commanding Officer, Mather Field.

Address: Mather Field, California.

William Terrell Atkinson

ATKINSON, WILLIAM TERRELL, Railway Business; born, Florence, Tex., April 16, 1888; son of George C. Atkinson and Beatrice Atkinson; married, Essie Leah Peterson, May 4, 1918.

Education: Public schools of Florence, Tex. and Georgetown, Tex.

Professional: 1906, with the Pacific Coast Steamship Co.; with the following railroads: New York Central, Lake Shore & Michigan Southern, Santa Fe, Pacific Mail Steamship Co., Union Pacific.

Aeronautical Activities: First took up aviation at the Richmond School of Aviation, Richmond, Calif. in 1914; entered the U. S. Air Service, Nov. 23, 1917; stationed at Fort Wayne, Detroit, Mich., Jan. 15, 1918 to Feb. 22, 1918; entered Ground School at Cornell University, Ithaca, N. Y., Feb. 23, 1918; Cadet, Camp Dick, April 1918; training at Carlstrom Field, Brooks Field and Rich Field; transferred to Love Field as Flying Instructor; discharged at Camp Travis, Aug. 1919; purchased Curtiss JN4D and carried passengers and did exhibition flying in and around San Antonio, Tex. for few months.

Flying Rating: Reserve Military Aviator; Aero Club of America Pilots Certificate; Civil Flying License from Joint Army & Navy Board on Aeronautic Cognizance.

Present Occupation: Clerk, A. T. & S. F. Railroad.

Address: Joy and Hickory Streets; home, 1228 Olive St., Kansas City, Mo.

Harold Percival Ayres

AYRES, HAROLD PERCIVAL, Commercial Aviator; born, Reading, England, March 8, 1894; son of George Ayres and Emma (Cook) Ayres.

Education: Public schools of Reading, England and Minneapolis, Minn.; University of Toronto School of Military Aeronautics.

Professional: 1914-1916, salesman; Aug. 1919 to Nov. 1920, commercial flying with Canuck in Indiana, Illinois, Kentucky, Michigan.

Aeronautical Activities: 1917-1919, Royal Flying Corps; 1919-1920, commercial flying; 1921 organized Michigan Aero-Service Corp.

Flying Rating: Flying officer, R.F.C. 1917-1919; R.Ae.C., No. 6704.

War Service: Shatwick, Vendome, Dunkerke; later attached to Grand Fleet in North Sea.

Member: Royal Air Force Club, London; Mich. Comm. Aero Ass'n.; Aviation Country Club, Detroit; Aero Club of America; American Legion; Aeronautical Chamber of Commerce.

Address: 941 E. 47 St., Chicago, Ill.

Edward Axberg

AXBERG, EDWARD, Aviator; born, Lake Park, Minn., Dec. 24, 1889; married, Pearl Capell, Nov. 24, 1919.

Education: Lake Park, Minn. and Fargo, N. D.

Professional: 1913-1915, Spokane & Eastern Trust Co., Spokane, Wash.; 1915-1917, Enderlin State Bank, Enderlin, N. D.

Aeronautical Activities: Cadet course from May to Sept. 1918 at Carruthers Field; Instructor to 1919; civilian flying, 1919-1921 in N. D., Minn. and Fla.

Flying Rating: Reserve Military Aviator, Sept. 1918; Aero Club of America certificate No. 8492, Dec. 1918.

Present Occupation: Commercial aviation.

Address: Vallamont Apts., Spokane, Wash.

Lysle R. Baas

BAAS, LYSLE R., Musician; born, Moline, Ill., March 30, 1894; son of Leo F. Baas and Cornelia N. Baas.

Education: Los Angeles Polytechnic High School; U.S.C., 1916-1917; Officers Ground School, 1918, University of California.

Professional: Composer and conductor of music since 1910; pharmacist since 1916.

Aeronautical Activities: Air Service, 1917. Commissioned Jan. 1919; passenger carrying to July 1920; Test Pilot for Gephart Ltd., Kansas City, Mo., 1920.

Flying Rating: Reserve Military Aviator, Nov. 1918.

War Service: Dec. 1917 to present date.

Present Occupation: Musician.

Address: 1605 New Hampshire Ave., Los Angeles, Calif.

David Leonard Bacon

BACON, DAVID LEONARD, Aeronautical Engineer; born, Norwich, Conn., Dec. 30, 1895; son of Leonard Woolsey Bacon and Letitia (Jordan) Bacon; married, Molly T. Hart, Oct. 18, 1920.

Education: Public schools of Lausanne, Switzerland, Dresden, Germany, Norwich, Conn.; Ph. B., Sheffield Scientific School, Yale Univ., 1916.

Professional: Greist Mfg. Co., 1916.

Aeronautical Activities: Engineer, Gallaudet Aircraft Corp., 1917-1920; in charge of wind tunnel research for N.A.C.A., 1920 to date.

War Service: Chief Electrician, U.S.N.R.F., Mar. 1917 to Oct. 1918.

Member: American Society of Mechanical Engineers.

Present Occupation: In charge, wind tunnel research, N.A.C.A.

Address: Research Laboratory, Langley Field, Hampton, Va.

John B. F. Bacon

BACON, JOHN B. F., Coal Business; born, Jacksonville, Fla., Aug. 24, 1891; son of Mark R. Bacon and Mary (Ford) Bacon.

Education: Public schools of Wyandotte, Mich.; 1911, Phillips Exeter Academy, Ph.B. 1915, Yale University.

Professional: President, Bacon-Fuller Coal Co. of Alabama.

Aeronautical Activities: Instructor, Engine Department, U. S. School of Military Aeronautics, Berkeley, Calif. during war.

War Service: As above.

Books: "Elements of Aviation Engines".

Present Occupation: Coal business.

Address: 174 N. Biddle Ave., Wyandotte, Mich.

William Terry Badham

BADHAM, WILLIAM TERRY, Coal mining; born, Birmingham, Ala., Sept. 27, 1895; son of Henry Lee Badham and Helen Jenette (Terry) Badham.

Education: Lawrenceville Preparatory school; Ph. B., 1917, Yale University.

Professional: Coal mining business since 1919.

Aeronautical Activities: None other than war service; American Ace officially credited with destruction of 5 German airplanes.

Flying Rating: Aerial Observer.

War Service: With French Squadrons from Jan. to May 1918; with American Forces from May 1918 to Jan. 1919.

War Honors: Distinguished Service Cross.

Present Occupation: Superintendent, Wind Rock Coal and Coke Co.

Address: 1312 American Trust Bldg.; home 1221 Whitaker Street, Birmingham, Ala.

Alfred B. Baker

BAKER, ALFRED B., 1st Lieut., U. S. A.; born, May 30, 1891; son of John Baker and Amia L. Baker.

Education: McKinley High School, Washington, D. C.; LL.B. 1911.

Professional: Practiced Title Law in Washington until 1917.

Aeronautical Activities: Flying Cadet with R. A. F. in Canada; assigned to 12th Aero Squadron as Pilot, April 1918; active war flying until July 1919; shot down and wounded in battle with enemy Fokkers near Chateau Thierry.

Flying Rating: Reserve Military Aviator, Dec. 1917; Airplane Pilot.

War Honors: Croix de Guerre with palm.

Member: Aero Club of America.

Present Occupation: 1st Lieut., U. S. Army, C. O. 10th Observation Squadron.

Address: Bolling Field, Anacostia, D. C.

Albert Clifford Baker

BAKER, ALBERT CLIFFORD, Aeronautical Engineer; born, Maidstone, England, June 6, 1897; son of James Baker and Elizabeth Baker; married, Elsie Covel, May 1, 1919.

Education: Maidstone Technical & Engineering College; Engineering 1st Deg., 1914.

Aeronautical Activities: Transferred from Yeomanry to R.F.C., March 6, 1915; credited with destruction of 22 machines; discharged with rank of Major, Aug. 1919.

Flying Rating: Major, R. A. F.

War Service: Aug. 1914 to Aug. 1919.

Honors: Military Cross, Dec. 1914; Distinguished Flying Cross, 1917; Air Force Cross, 1917.

Address: 891 Burrard St., Vancouver, B. C.

Gilbert Charles Baker

BAKER, GILBERT CHARLES, Oil Business; born, Boonville, Ind., July 10, 1898; son of Frank Baker and Carrie (Carter) Baker.

Education: Public school and high school, Boonville, Ind.

Professional: Newspaper reporter, 1919; Oil Co., Jan. 1920 to date.

Aeronautical Activities: Student pilot, Park Field, Love Field and Ellington Field.

Flying Rating: Reserve Military Aviator.

War Service: Air Service, Dec. 1917 to March 1919.

Present Occupation: Oil Business.

Address: Drumwright, Okla.; home, R. F. D. No. 2, Meno, Okla.

Harry McLaughlin Baldwin

BALDWIN, HARRY MCLAUGHLIN, Farmer; born, Brooklyn, Wis., June 28, 1895; son of Boyd M. Baldwin and Minnie Baldwin; married, Clara E. Zum Brunnen, Dec. 31, 1918.

Education: Brooklyn & Belleville High School; B. S., University of Wisconsin, College of Agriculture.

Aeronautical Activities: O.T.C., Fort Sheridan, Aug. 27 to Nov. 27, 1917; commissioned 2nd Lieut., Nov. 27, 1917; Engineer, Officers Ground School, Columbus, Ohio, Dec. 10, 1917, M.I.T., Jan. 18, 1918; Airplane Mechanics School, Barron Field, Feb. 14 to April 23, 1918; Asst. Engineer Officer, Barron Field, April 23 to Aug. 31, 1918; discharged, Feb. 28, 1919.

War Service: Aug. 27, 1917 to Feb. 28, 1919.

Member: American Legion.

Present Occupation: Farmer.

Address: Rural Route No. 1, Brooklyn, Wis.

Theodore A. Baldwin, Jr.

BALDWIN, THEODORE A. JR., Colonel, Air Service; born, Fort Sill, Indian Territory, Aug. 1, 1878; son of Theodore A. Baldwin, Sr. and Cecelia (DeJaen) Baldwin; married, Agnes Judge, 1899.

Education: Lake Forest Academy, Lake Forest, Ill.; Mass. Inst. of Tech.; Infantry and Cavalry School, 1906; Army Staff College, 1907.

Professional: Entered U. S. Army, 1898, with 5th Army Corps in Cuba in the battle of San Juan Hill; assigned to 24th Inf. and on duty with same until 1905; on duty at Army School of Line and Staff Colleges, 1905-1907; Captain, 8th Inf., 1905-1907; Captain, 26th Inf., 1907-1912; Captain, Quartermaster Corps, 1912-1916; Captain, 2nd Inf., 1916-1917; Major, 1st Inf., 1917; Lt. Col., National Army, 1917; Lt. Col., Air Service, 1917-1918; Colonel, Air Service 1918.

Aeronautical Activities: Detailed to Air Service, Oct. 1917; proceeded with A. E. F. to France same month; Personnel Officer, Air Service, A. E. F., Assistant to Chief of Air Service, A. E. F. until July 1918; in command of Orly Field, France, from July 1918 to April 1919; Chief of the Property Division, Off. Chief of Air Service, Washington, D. C., May 1919 to Oct. 1920; student, Fort Omaha, and Ross Field Balloon Observers' School from Oct. 1920 to Feb. 1921; Commanding Officer and Commandant, Ross Field, Balloon Observers' School from Feb. 1921 to date. (Nov. 1921).

Flying Rating: Balloon Observer, March 1921; Free Balloon Pilot.

Member: Army and Navy Club (Wash.); Metropolitan Club (Wash.); Chevy Chase Country Club (Wash.); California Club, Union League Club, both of Los Angeles, Calif.

Present Occupation: Colonel, Air Service.

Address: Ross Field, Arcadia, Calif.

Thomas Scott Baldwin

BALDWIN, THOMAS SCOTT, Aeronaut; born, Merriam County, Mo., June 30, 1854; son of Samuel Yates Baldwin and Jane Baldwin; married, Cary Poole, 1878.

Educated: Country School 1862-1870.

Aeronautical Activities: 46 years flying experience, 1875 to 1921; Originator of parachutes and first to descend from a balloon in a parachute in U. S.; at San Francisco, Calif., Jan. 30, 1885; also delivered first airship to Signal Corps, U. S. Army.

Flying Rating: Dirigible Balloon Pilots License No. 1; Aviator License No. 7 and Spherical Balloon License No. 9, Aero Club of America.

War Service: Commissioned as Captain in Air Service, April 25, 1917, active duty Aug. 31, 1917; Commissioned Major, June 18, 1918; during war was Chief, Army Balloon Inspection and Production; discharged Oct. 1919.

Member: Aero Club of America; Elks, No. 1 N. Y.; Odd Fellows; K. of P.; all branches of Masonic Order up to 32nd degree.

Present Occupation: District Mgr., Balloon Production and Inspection, Procurement Division Air Service U. S. Army, Goodyear Tire and Rubber Co.

Address: Care of Goodyear Tire & Rubber Co., Akron, O.



Thomas S. Baldwin

Gordon Hathorne Bancher

BANCHER, GORDON HATHORNE, Real Estate; born, Newtonville, Mass., March 26, 1894; son of Franklin Bancher and Annie L. Bancher; married, Pansy M. Benton, Dec. 9, 1917.

Educated: Newton High School, Newtonville, Mass.; Gem City Business College, Quincy, Ill.

Professional: Treas., Benton & Hopkins Investment Co., Oberlin, Kans.; Farm Loans, Real Estate, Abstracting and Insurance.

Aeronautical Activities: Observer's School, Fort Sill, Okla.; Aerial Gunnery School, Mt. Clemens, Mich.; graduate, Plattsburg, N. Y.

Flying Rating: Aerial Observer.

Present Occupation: Real Estate.

Address: Oberlin, Kans.

William Dudley Bancker, Jr.

BANCKER, WILLIAM DUDLEY, JR., Salesman; born, Omaha, Neb., June 24, 1892; son of William Dudley Bancker, Sr. and Mary (Johnston) Bancker; married, Thelma A. Langbein, Jan. 26, 1918.

Educated: Omaha High School; Lake Forest Academy, 1913; Creighton University.

Professional: Central Supply Co., Indianapolis, Ind., 1913 to Sept. 1917.

Aeronautical Activities: Ohio State University Ground School, Sept. 1917; flying at Scott Field; transferred to Ellington Field and assigned Assistant Officer in Charge; various duties at Ellington Field until discharge, April 17, 1919.

Flying Rating: Reserve Military Aviator, Feb. 18, 1918.

War Service: Air Service, Sept. 1917 to April 1919.

Honors: Aero Club of America Medal of Merit for Ellington Field to Washington, D. C. flight in 30 hr. flying time.

Present Occupation: Salesman, Art Brass Co., New York City.

Address: Highland Apt., Rockford, Ill.

Thurman Harrison Bane

BANE, THURMAN HARRISON, Major, Air

Service; born, San Jose, Calif., June 12, 1884; son of Adam Clark Bane and Florence Cedonia (Harrison) Bane; married, Bessie Louise Dickinson, May 29, 1919.

Educated: Public Schools, including Lowell High School, San Francisco, Calif.; Graduate of U. S. Military Academy, West Point, 1907.

Professional: Entered Army as 2d Lieut. in the 14th Cavalry; Promoted 1st Lieut. in 1912; Captain, 1916. Major and Lt. Col. 1917 and Colonel, 1918; Just before America entered the World War (Nov. 1916) was transferred from the 6th Cavalry to the Aviation Section of the Signal Corps with the rank of 1st Lieut. After ten years of service in the Cavalry, was first assigned to the Aviation School at San Diego, Calif. and later became secretary and officer in charge of experimental shops at the school; promoted to Captain in June, 1917, to date from Sept., 1916; In Aug. promoted to Major and assigned to Command of the 14th Aero Squadron; Relieved of that Command on Oct. 1, 1917 and ordered to Washington to act as Assistant to the Executive, Air Division, as a member of the examining board; Promoted to Lt. Col. in October; Jan. 1918, made a member of the Army and Navy technical aircraft board, in charge of designs and specifications for aircraft; Next assignment was as executive officer of the Air Division, and then as Chief of the Technical Section of the Bureau of Military Aeronautics; In Oct. 1918, was ordered to Dayton, O., as Chief of the Technical Section and on temporary duty with the Bureau of Aircraft Production; at Dayton was in command of all test work at Wilbur Wright Flying Field; In charge of that work until after signing of the armistice; Has since been Chief of the Engineering Division, Air Service and Commanding Officer of McCook Field, Dayton, O.

Flying Rating: July 1917, Junior Military Aviator.

War Honors: "Commander of the Order of the Crown of Italy" conferred by the King of Italy, May 10, 1920.

Member: National Advisory Committee for Aeronautics; Society of Automotive Engineers; American Society of Mechanical Engineers.

Present Occupation: Chief, Engineering Division, Air Service and Commanding Officer of McCook Field.

Address: McCook Field, Dayton, O.

Paul Elsworth Barden

BARDEN, PAUL ELSWORTH, Insurance Business; born, Wessington, S. D., May 25, 1894; son of George Barden and Emma (Greene) Barden.

Educated: Public school, Mitchell, S. D.; high school of Missoula, Mont.; 1914-1915, Oregon Agr. College; 1916-1917, Georgetown University.

Professional: 1915, Law office; Department of State, two years; Sec. of Colonial Marine Underwriters, Ltd., Montreal, Canada, 1921 to date.

Aeronautical Activities: Ground School, Berkeley, Calif., 1917; elementary flying training, Lake Charles, La., 1918; pursuit flying training, Lake Charles, La.; pursuit gunnery instruction, Arcadia, Fla.

Flying Rating: Reserve Military Aviator, May 1918.

War Service: Air Service, U. S. Army, July 1917 to Jan. 1919.

Present Occupation: Secretary of Colonial Marine Underwriters, Ltd., Montreal, Canada.

Address: Room 219, Board of Trade Bldg.; home, 284 Beaver Hall Hill, Montreal, Canada.

Hugh Hatfield Barker

BARKER, HUGH HATFIELD, Commercial Aviation; born, Norton, Kans., April 19, 1897; son of I. C. Barker and Eva Barker; married, Marion E. Brown, Jan. 10, 1920.

Educated: Public schools.

Aeronautical Activities: Army, July 1918 to Jan. 1919; instructor from Oct. 1918 to Jan. 1919; Donaldson Bros. Flying Circus, 1919; flying in Central and Southern states, 1919-1920; formed Barker Aircraft Corp., March 1920; continued until March 1921 when the Corp. became the H. H. Barker Aircraft Co.

Flying Rating: Reserve Military Aviator, Oct. 1918.

War Service: Idaho National Guard, April to Nov. 1917; Signal Corps, Nov. 1917 to March 1918; School Military Aeronautics, 1918; discharged Jan. 1919.

Present Occupation: Commercial Aviation.

Address: Gooding, Kans.

Frederick William Barker

BARKER, FREDERICK WILLIAM, Patent Attorney; born, London, England, Dec. 18, 1864; son of Walter Barker and Amelia Elizabeth (Bonney) Barker; married, Constance Beatrice Reynolds, Oct. 31, 1888.

Educated: Whitgift School, Croydon, England.

Professional: Patent Attorney from 1885 to date. Practiced in England, Washington, D. C., and New York; closely allied with the automotive industry since its inception and was one of the attorneys for Henry Ford in the Selden Suit.

Member: Aeronautical Society of America (past President); Aero Club of America; Patent Office Society; Richmond County Country Club;

British Schools and Universities Club; City Club; Great Kills Yacht Club.

Present Occupation: Patent Attorney.

Address: 217 Broadway, New York, N. Y.; home, 905 Union St., Brooklyn, N. Y.

Marshall J. Barlow

BARLOW, MARSHALL J., Banking Business; born, Thornton, Iowa, July 9, 1896; son of James D. Barlow and Harriette M. Barlow; married, R. E. West, Jan. 2, 1920.

Educated: High School, Thornton, Iowa; State University of Iowa.

Aeronautical Activities: Enlisted at Ft. Omaha, Neb.; trained at Camp Dick, S.M.A., Ithaca, N. Y., Post Field and Camp Dodge, Feb. 1918 to March 1919.

Flying Rating: Reserve Military Aviator.

Member: Flyers' Club, University of Iowa.

Present Occupation: Banking business.

Address: Gilmore Exchange Bank, Gilmore City, Iowa.



Thurman H. Bane

Ralph Stanton Barnaby

BARNABY, RALPH STANTON, Engineer; born, Meadville, Pa., Jan. 21, 1893; son of Charles Weaver Barnaby and Jennie (Christy) Barnaby.

Educated: 1904-1908, Grace Church Choristers School, New York City; Trinity School, New York City; Mechanical Engineer 1915, Columbia University.

Professional: Elco Co., Bayonne, N. J.; 1915-1916, Production Engineering; in charge of sub-chaser assembly and test base at Montreal, P. Q.; The Standard Aero Corp., Jan. 1917 to Dec. 1917, Assistant Chief Engineer and head of Engineering Department.

Aeronautical Activities: 1907-1909, Model Airplane experiments; 1909-1911, man carrying gliders, first power flight 1911; aeronautic representative for Elco Co.; design and construction work for Standard Aero Corp.; aviation duty in Navy, 1917 to date.

War Service: U. S. Navy 1917 to date; overseas during war.

Member: Society of Automotive Engineers; American Society of Mechanical Engineers; Aero Club of America; Army and Navy Club; Columbia University Club.

Present Occupation: Lieutenant, Construction Corps, U. S. Navy; Aeronautical Engineer at Naval Aircraft Factory.

Address: Naval Aircraft Factory, Navy Yard, Philadelphia, Pa.

Philip Sheldon Barnes

BARNES, PHILIP SHELDON, Advertising; born, Kansas City, Mo., May 12, 1893; son of William Gregory Barnes and Clara Bell Barnes.

Educated: High school; 1918, University of California.

Professional: Advertising Manager of different automobile schools since 1914.

Aeronautical Activities: Ground School, S. M. A., Berkeley, Calif.; March Field; instructing 2nd Solo Stage until discharged in 1919.

Flying Rating: Reserve Military Aviator.

War Service: Nov. 1917 to April 1919.

Member: Aero Club of America.

Present Occupation: Advertising Manager, National Automotive School.

Address: 807 South Figueroa; home, 1044 West 8 St., Los Angeles, Calif.

Phinehas Putnam Barnes

BARNES, PHINEHAS PUTMAN, Engineer; born, Norway, Me., Sept. 21, 1897; son of Charles P. Barnes and Annie M. Barnes.

Educated: Norway and Houlton, Me.; A. B. 1930, Colby College.

Professional: American Telephone & Telegraph Co. *Aeronautical Activities:* Flying cadet, Selfridge Field, 1918.

Flying Rating: Fighting Observer.

War Service: U. S. Air Service.

Member: D. K. E. Club (N. Y.).

Present Occupation: Commercial Engineering Department, American Telephone & Telegraph Co. *Address:* 195 Broadway, New York City; home, 31 Park St., Houlton, Me.

G. Edward Barnhart

BARNHART, G. EDWARD, Consulting Aeronautical Engineer; born, Pasadena, Calif., July 31, 1893; son of Clyde Chassel Barnhart and Mamie E. (Alson) Barnhart; married, Ella Blanche Little, July 25, 1917.

Educated: Public schools of Pasadena, Calif.; Throp Polytechnic Institute.

Aeronautical Activities: 1909 to 1910, designed, built and flew experimental gliders; 1911-1912, designed and built a pusher biplane, had first flying experience and learned to fly this machine. The machine was later sold to the Mills Aviators of Chicago; 1912-1914, with Glenn L. Martin Co., Los Angeles, Calif., experimental building, engine adjustment and field work in connection with airplane building and designing; June 1914 to Nov. 1914, designed and built two pusher biplanes and two monoplanes; 1914 to 1916, with Curtiss California Airplane Co., San Diego, Calif., as experimental aeronautical engineer and airplane constructor; 1916 to Aug. 1917, with the U. S. Signal Corps Aviation School, San Diego, Calif.; Aug. 1917 to May 1918, Wilbur Wright Field as Aeronautical Mechanical Engineer and Research Engineer for that field; May 1918 to March 1919, with Standard Aircraft Corp., Elizabeth, N. J. as assistant to the Vice President and Consulting Engineer and later as Chief Engineer in charge of Handley Page engineering department; March 1919 to Oct. 1919, Experimental Engineer, B. F. Goodrich Co., Akron, Ohio; Oct. 1919 to Jan. 1920, inspection of aviation fields; Jan. 1920 to Sept. 1921, with C. Robert Little, Pasadena, Calif., as Consulting Aeronautical Engineer; Sept. 1921 to date, Vice Pres. & Consulting Engineer, Barnhart Aircraft Inc., Pasadena, Calif.

Books: D. M. A. Mechanics Training Information for the A. B. and C course.

Member: Associate Fellow, Royal Aeronautical Society of Great Britain; Junior member, American Society of Mechanical Engineers; American Society for Testing Materials; Society of Automotive Engineers; Aero Club of Southern California.

Present Occupation: Consulting Aeronautical Engineer.

Address: 44 W. Green St.; home, 191 Mari-on Ave., Pasadena, Calif.

George Clark Barrett

BARRETT, GEORGE CLARK, Grocer; born, Mason City, Iowa, Aug. 3, 1892; son of Charles C. Barrett and Ida Barrett.

Educated: Public schools of Mason City, Iowa; Iowa State College.

Aeronautical Activities: S.M.A., Austin, Tex., 1917; Cadet Bomber, Ellington Field; Cadet Flyer, Carlstrom Field, 1918; commercial aviation, 1920-1921.

Flying Rating: Reserve Military Aviator, May 1919.

War Service: Army, May 1917 to May 1918.

Present Occupation: Grocer.

Address: 203 N. Fed. Ave., Mason City, Iowa.

Alfred W. Barrett Jr.

BARRETT, ALFRED W., JR., Automobile Business; born, Dedham, Mass., Sept. 6, 1897; son of Alfred Barrett, Sr. and Frances (Lalor) Barrett; married, Margaret Flanagan, March 28, 1919.

Educated: Grammar and high school.

Professional: Motorcycle business; Automobile School business.

Aeronautical Activities: Two years with Curtiss; field manager for James McGrath.

Present Occupation: Inspector.

Address: 4810 Chestnut St., Philadelphia, Pa.

Stephen Sears Barrows

BARROWS, STEPHEN SEARS, Hardware; born, Ojai, Calif., Nov. 26, 1886; son of Frank P. Barrows and Julia Emily (Smith) Barrows.

Educated: Public schools and preparatory school of Ojai, Calif.; B.S. 1917, University of California.

Professional: Hardware merchant, 1900-1914; salesman, 1910 to date, for Sloss and Brittain, San Francisco, Calif.

Aeronautical Activities: First graduating class,

School for Aerial Observers, Fort Sill, Okla., Sept. to Nov. 1917; 1st Corps, School for Aerial Observers, Amanty, France, Feb. to April 1918; 287th French Squadron, April to May 1918; 88th Aero Squadron, May 1918 to April 1919; Aerial Gunnery School, Cazaux, France; Operations Officer, 3rd Corp Air Service, Aug. 4 to Sept. 18, 1918; Operations Officer, 88th Squadron, Sept. 18 to April 1, 1919; commissioned 1st Lieut., F.A., O.R.C. and active duty, April 1919, Captain, Air Service.

Flying Rating: Aerial Observer, April 1918.

War Service: Nov. 1917 to Jan. 1919.

Member: Pacific Aero Club.

Address: 77-99 Beale St., care of Sloss and Brittain, San Francisco, Calif.; home, 319 Milpas St., Santa Barbara, Calif.

Louis Thomas Barry

BARRY, LOUIS THOMAS, Electrical Engineer; born, Olean, N. Y., March 31, 1893; son of John Barry and Abbie (Meaney) Barry.

Educated: Olean High School; B. S. 1920, Electrical Engineering, Carnegie Institute of Technology.

Professional: Salesman, Electric Service Supplies Co., 1920 to date.

Aeronautical Activities: Commissioned 2nd Lieut., Air Service, from Engineering Officers Training School, Boston Tech., July 1918; duty at Barron Field to April 1919.

Flying Rating: Reserve Military Aviator.

War Service: July 1918 to Oct. 1919.

Member: Army and Navy Club; Aero Club of America.

Present Occupation: Salesman, Electrical Apparatus.

Address: 829 Oliver Bldg., Pittsburgh, Pa.; home, 810 Garden Ave., Olean, N. Y.

Joseph Garfield Bastow

BASTOW, JOSEPH GARFIELD, Agriculturist; born, College, Utah, Aug. 14, 1892; son of Joseph Bastow and Dortha (Christensen) Bastow; married, Irene Ricks, May 1, 1918.

Educated: Public schools of St. Charles, Idaho; Brigham Young College; B.S. 1921, Utah Agricultural College; University of California.

Professional: Secretary and Treasurer of Cache County Farmers Equity, 1919-1921.

Aeronautical Activities: Cadet training at Call Field, Dec. 1917 to April 1918; Post Field, May 1918; Pilot for Aerial Observers Training School; Taliaferro Field, June and July 1918; Gunnery School, Issoudun, France, Sept. 1918; Flying School; at the front with 1st Aero Squadron; Germany, Nov. 1918 to June 1919.

Flying Rating: Reserve Military Aviator, April 1918.

War Service: U. S. Army, Sept. 1917 to July 1919.

Present Occupation: Student, University of California.

Address: 2129 Channing Way, Berkeley, Calif.

Adaline Joseph Bartoli

BARTOLI, ADALINE JOSEPH, Commercial Aviation; born, Woodland, Calif., July 1, 1892; son of John Bartoli and Paradise (Salani) Bartoli; married, Marie Richie, June 29, 1919.

Educated: Public schools of Woodland, Calif. and Lucca, Tuscany, Italy.

Professional: Aeroplane constructor; pattern and cabinet maker.

Aeronautical Activities: Joined the Irwin Aircraft Co. in 1915; building and operating aeroplane to date; learned to fly in 1914.

Present Occupation: Secretary, Irwin Aircraft Co.

Address: Irwin Aircraft Co.; home, 901 U Street, Sacramento, Calif.

Charles Everett Bauch

BAUCH, CHARLES EVERETT, Lieut., U. S. N.; born, Dorchester, Mass., May 26, 1897; son of Charles A. Bauch and Margaret C. Bauch.

Educated: Mechanic Arts High School; Huntington School; Tufts College.

Aeronautical Activities: On Navy submarine patrol during war; later, instructing in kite balloons and dirigibles; assigned to Bureau of Construction and Repair, Navy Department, as lighter-than-air test pilot, erecting and testing all new Navy lighter-than-air craft; Sept. 1921, assigned to Bureau of Aeronautics as lighter-than-air test pilot.

Flying Rating: Free Balloon Pilot, April 1918; Naval Aviator; Italian semi-rigid airship pilot No. 102.

War Service: U. S. Navy, April 1917 to date; flying on submarine patrol during war.

War Honors: Commandante di Dirigibile Esploratore, (Italian).

Member: Aero Club of Massachusetts; Raquet Club (Wash.).

Present Occupation: Lieut., U. S. Navy.

Address: Bureau of Aeronautics, Navy Department, Washington, D. C.; home, 3 Clermont St., Dorchester, Mass.

Byrne Virchow Baucom

BAUCOM, BYRNE VIRCHOW, Capt., Air Service; born, Milford, Tex., June 19, 1892; son of James B. Baucom and Edith E. (Himmell) Baucom.

Educated: Milford High School, Milford, Tex.; University of Texas.

Professional: Journalist and linotype operator; resigned from the Texas Legislature in Nov. 1920 to return to the Air Service.

Aeronautical Activities: Training at Ft. Sill, Dec. 1917 to Feb. 1918; active duty in France, May 1918 to July 1919; C. O. Provisional Pursuit Squadron, Langley Field, June 1921.

Flying Rating: Aerial Observer, Feb. 1918; Reserve Military Aviator, March 1919.

War Service: Army Air Service, Nov. 1917 to date.

War Honors: Distinguished Service Cross; two citations: Byrne V. Baucom, Second Lieutenant, Air Service, Observer, 1st Aero Squadron. "For extraordinary heroism in action in the Chateau-Thierry and St. Mihiel Salients, France. Lieutenant Baucom, with 1st Lieut. William P. Erwin, pilot, by a long period of faithful and heroic operations set an inspiring example of courage and devotion to duty to his entire squadron. Throughout the Chateau-Thierry actions in June and July, 1918, he flew under the worst weather conditions and successfully carried out his missions in the face of heavy odds. In the St. Mihiel Sector, Sept. 12-16, 1918, he repeated his previous courageous work. He flew as low as fifty feet from the ground behind enemy lines, harassing German troops with machine guns and rifles. He twice drove off enemy planes which were attempting to destroy American observation balloons. On Sept. 12-13, 1918, he flew at extremely low altitudes and carried out infantry contact patrols successfully. Again on Sept. 12 he attacked a German battery, forced the crew to abandon it, shot off his horse a German officer who was trying to escape, drove the cannoners to their dugouts, and kept them there until the infantry could come up and capture them." "For the act of extraordinary heroism in action near Sedan, France, Nov. 5, 1918, Lieut. Baucom is awarded an oak-leaf cluster to be worn with the Distinguished Service Cross awarded him Oct. 1, 1918. With atmospheric conditions such that flying was almost impossible, he voluntarily undertook a flight as observer to locate the position of enemy troops and machine-gun nests which had been holding up our advance and causing severe casualties. Forced to fly at a very low altitude and subject to almost constant anti-aircraft and rifle fire, he obtained the information that was vital to the success of our operations and dropped the message at Division Headquarters. He then penetrated far into the enemy lines and opening fire upon enemy crews routed them from a series of machine-gun nests. When his machine was finally shot down, he succeeded in operating the gun and beat off an attack by the enemy in force. Armed only with revolvers and German grenades which they found in an enemy emplacement, he and his observer then worked their way back to the American line with valuable information, repeatedly subjected to enemy fire on their way.

Present Occupation: C.O. 94th Squadron (Pursuit).

Address: Ellington Field, Houston, Tex.; home, Milford, Tex.

Rosenham Beam

BEAM, ROSENHAM, Captain, Air Service; born, Bardstown, Ky., June 11, 1895; son of David Dee Beam and Mary Jane Beam; married, Carolyn Frances Wittman, Dec. 6, 1917.

Educated: Louisville High School.

Professional: U. S. Navy and U. S. Army since Oct. 23, 1913.

Aeronautical Activities: Aerial Observation Training, Post Field; Aerial Gunner's Training, Selfridge Field; Adjutant Pilot and Observer on Border Patrol, Texas, June 1919 to July 1920; Adjutant and Observer, Artillery Firing Center, Camp Knox, July 1920 to May 1921; duty at Langley Field since May 1921.

Flying Rating: Aerial Observer's Certificate, June 1918; Aerial Gunner's Certificate, Oct. 1918;

War Service: As above.

Present Occupation: Captain, Air Service.

Address: 178 Bellar Ave., Louisville, Ky.

Arthur H. Becker

BECKER, ARTHUR H., Clothing Manufacturing; born, Kulpville, Pa., June 26, 1894; son of Joseph F. Becker and Anna W. Becker.

Educated: Public schools; Lansdale High School; Brown Preparatory School; Lafayette College.

Aeronautical Activities: M. I. T. Aug. 1917; Tours, France, Nov. 1917; Brevet, May 1918; Issoudun, France, May 1918; ferry pilot and test pilot, 1st Pursuit Group; arrived in U. S., Feb. 1919.

Flying Rating: Reserve Military Aviator; French Brevet.

War Service: July 1917 to Feb. 1919.

Present Occupation: Clothing Manufacturing.

Address: Kulpville, Pa.

Frederick Bedell

BEDELL, FREDERICK, Professor; born, Brooklyn, N. Y., April 12, 1868; son of Edwin F. Bedell and Caroline (Cunningham) Bedell; married, Mary Louise Crehore, July 1, 1896.

Educated: Public schools of Montclair, N. J.; A. B. 1890, Yale College for Undergraduates; Ph. D. 1892, Cornell University.

Professional: 1892-1893, Instructor at Cornell University; 1893 to date, Professor of Applied Electricity, Cornell University.

Aeronautical Activities: Served on commission in 1917, for establishing U. S. Schools of Military Aeronautics.

Books: "Airplane Characteristics," 1918; "The Air Propeller," 1919; "The Airplane," 1920.

Member: Aero Club of America; Pioneer Member, Aeronautical Society of America; Hon. Member, Aero Club of Ithaca; Hon. Member, Cornell Flying Club; Member and past Vice President, American Institute of Electrical Engineers; Fellow, American Physical Society.

Present Occupation: Professor, Cornell University.

Address: Cornell University, Ithaca, N. Y.



Lawrence D. Bell

Levi L. Beery

BEERY, LEVI L., 1st Lieut., Air Service; born, Salem, Iowa, 1888; son of Enoch Beery and Susie Beery.

Educated: Salem High School; LL.B. 1911, Drake University.

Professional: General law practice three and a half years.

Aeronautical Activities: Ground School, Berkeley, Calif., 1917; training at Call, Love, and Ellington Fields during 1918; Border Patrol, 1919-1920; Langley Field, 1921.

Flying Rating: Airplane Pilot.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Richard Maybeck Beil

BEIL, RICHARD MAYBECK, Motion Pictures; born, Chicago, Ill., July 1, 1898; son of Carl F. Beil and Irene (Maybeck) Beil.

Educated: Morgan Park Military Academy; Chemical Engineering, Armour Institute of Technology.

Professional: Motion picture photography.

Aeronautical Activities: Worked with E. K. Jaquith during summer of 1920; on flying duty in the Air Service (Instructor).

Flying Rating: Reserve Military Aviator.

War Service: U. S. Air Service, Oct. 1917 to Dec. 1918.

Member: Aviation Club of Chicago; Aero Club of Illinois; Aero Club of America; Air Service Officer's Association.

Present Occupation: Banking.

Address: 1445 Argyle Ave., Chicago, Ill.

Lawrence Dale Bell

BELL, LAWRENCE DALE, Executive; born, Mentone, Ind., April 5, 1894; son of I. E. Bell and Harriette (Sarber) Bell; married, Lucille M. Mainwaring, July 17, 1915.

Educated: Polytechnic High School, Santa Monica, Calif.

Aeronautical Activities: The Glenn L. Martin flight

Co., Los Angeles, Calif., aircraft construction and airplane and engine maintenance, 1912-1914; Superintendent of Construction, The Glenn L. Martin Co., Los Angeles, Calif., 1914; General Superintendent, The Glenn L. Martin Co., Los Angeles, Calif., 1915; Manager, The Glenn L. Martin Co., Los Angeles, Calif., 1916; Executive, Wright-Martin Aircraft Corp. of New York, and Manager of The Glenn L. Martin Co., Los Angeles, Calif., Jan. to Oct., 1917; Factory Manager, The Glenn L. Martin Co., Cleveland, Ohio, Oct., 1917 to March 1, 1921; March 1, 1921 to date, Vice President & Asst. Genl. Mgr., The Glenn L. Martin Co., Cleveland, Ohio.

Member: Society of Automotive Engineers.

Present Occupation: Vice President and Asst. Genl. Manager, The Glenn L. Martin Co., Cleveland, Ohio.

Address: The Glenn L. Martin Co., 16800 St. Clair Ave., Cleveland, Ohio; home; 2729 Euclid Heights Blvd., Cleveland Heights, Ohio.

Giuseppe M. Bellanca

BELLANCA, GIUSEPPE M., Aeronautical Engineer; born, Sciacca, Italy, March 19, 1886; son of Andrew C. Bellanca and Concetta N. Bellanca.

Educated: Sciacca public and high schools; Milan (Lombardy) Technical School; Prof. of Industrial Mathematics, 1910, Royal Institute of Milan.

Professional: Aeronautical Consulting Engineer, Aircraft Designer and Constructor since 1906; flyer since 1912; airplane instructor, 1912-1916.

Aeronautical Activities: While student in Milan, started public experiments of aviation in March 1906; built in Milan, in collaboration with E. Bossi and P. Invernizzi (1908-1909) a two-seater pusher biplane with Züst motor; tested this machine Sept. 8, 1909 at the aviation field of Baggio near Milan; designed in 1909 and constructed in 1910, at the Aerodrome of Talledo, the first Tractor Biplane embodying the general characteristics of Tractor Biplane now generally used; designed and constructed in Brooklyn, 1911, a single seater parasol monoplane; learned to fly in this airplane without any assistance, at Mineola in 1912; was flying instructor for the Bellanca Aeroplane School at Mineola 1912 to June 1916, instructing an average of 11 pupils a year; used Bellanca Parasol Monoplanes; designed and manufactured in connection with the Maryland Pressed Steel Co., Hagerstown, Md., the Bellanca C. D. Tractor Biplane and the Bellanca C. E. Tractor Biplane; Consulting Engineer of the Maryland Pressed Steel Co., 1917-1920; inventor of the Bellanca detachable turnbuckle.

Member: Aero Club of America.

Present Occupation: Aircraft designer and manufacturer.

Address: 1927 78th St., Brooklyn, N. Y.

Patrick Neison Lynch Bellinger

BELLINGER, PATRICK NEISON LYNCH, Lt. Comdr., U. S. N.; born, Cheraw, S. C., Oct. 8, 1885; son of Carnot Bellinger and Eleanor (Lynch) Bellinger.

Educated: Naval Academy 1907.

Professional: U. S. Navy, Cadet to Lt. Commander, 1907; Won highest final merit in Navy in charge 12 in. gun, 1910; Submarine duty, 1912.

Aeronautical Activities: U. S. Naval Academy (Aviation duty) (Nov. 26, 1912 to Dec. 21, 1912) Guantanamo, Cuba (Aviation duty) (Jan. 10, 1913-Mar. 15, 1913); Detailed as flyer of heavier-than-air craft by Secretary of the Navy, March 5, 1913; U. S. Naval Academy (Aviation duty) (March 24, 1913-Jan. 12, 1914); U. S. S. Mississippi, Aeronautic ship Pensacola, Fla. (Aviation duty) (Jan. 21, 1914-July 21, 1914); In charge Aeroplane Section at Vera Cruz, Mexico during seizure and occupation of Vera Cruz, 1914; During which period piloted aeroplane for 43 consecutive days—making flights over enemy's territory; Aeroplane was struck in three places by enemy's fire during one scouting flight over enemy's territory; U. S. S. North Carolina (Ship and Aviation duties) (July 25, 1914 to Dec. 4, 1914); Pensacola, Fla. Naval Aeronautic Station (Aviation duty) (Jan. 12, 1915—March 11, 1916); In charge special Aviation Section cooperating with Army Experimental Mortar Firing at Fortress Monroe, Va. (July 25, 1915 to Aug. 25, 1915); U. S. S. North Carolina (In charge Aviation Section) (March 11, 1916-Dec. 18, 1916); Pensacola, Fla. Naval Aeronautic Station (Aviation duty) (Dec. 22, 1916-Nov. 26, 1917); Temporary duty selecting suitable site for naval air station resulting in Miami, Fla. (Aug. 9, 1917-Oct. 2, 1917); Commanding Officer Naval Air Station, Hampton Roads, Va. (Nov. 30, 1917-March 17, 1919); Temporary duty in connection with selection of two Air Stations in Nova Scotia (May 6, 1918-May 20, 1918); Navy Department, Operations Trans-Atlantic Flight Section (March 20, 1919-April 22, 1919); Temporary duty on U. S. S. Barney selecting starting point for Trans-Atlantic Flight (March 22-April 12, 1919); Commanding Officer U. S. Seaplane NC-1, Trans-Atlantic flight (May 8, 1919-June 16, 1919); In charge

Material Division, Naval Aviation (July 2, 1919.

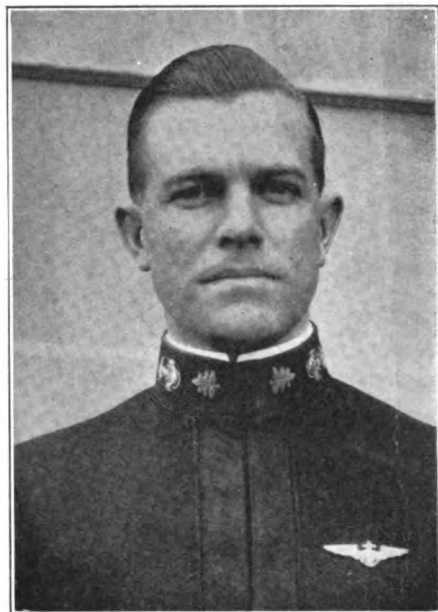
Flying Rating: Navy Air Pilot No. 4, Jan. 21, 1915, Naval Aviator March 22, 1915.

War Service: Navy Air Pilot No. 4, Jan. 21, 1915, Naval Aviator March 22, 1915; Received decoration from Portuguese Government—"Comman-de-Torre Espada"; Navy Cross.

Member: New York Yacht Club, Aero Club of America, Sewanaka Yacht Club, Army and Navy Club, (Wash.), University Club (Philadelphia), Catholic Club (N. Y.), American Legion.

Present Occupation: Office of Director of Naval Aviation, Washington.

Address: Navy Dept. Washington, D. C.



Patrick N. L. Bellinger

August Belmont

BELMONT, AUGUST, Banker; born, New York; N. Y., Feb. 18, 1853; son of August Belmont and Caroline Slidell (Perry) Belmont; married Elizabeth Hamilton Morgan, 1881.

Educated: Rectory School, Connecticut; Exeter Academy; B. A. 1874, Harvard University.

Professional: Entered office of father's banking business, 1876; built first New York Subway; also built Cape Cod Canal.

Aeronautical Activities: Commissioned a Major in the Aviation Section of the Signal Corps in France, Nov. 9, 1917; Assigned to purchasing department under Col. C. G. Davies; sent by General Pershing on special mission to Spain to arrange for supplies from that country for the A. E. F.

Member: Knickerbocker; Union; Midway; Harvard; N. Y. Y. C.; N. Y. A. C. Aero Automobile; Meadow Brook; Jockey Club; Turf & Field, Southside; India House; Church Club; Sons of Revolution; Army and Navy Club, N. Y.; American Legion; Military Order of Foreign Wars of U. S. A.

Present Occupation: Banker.

Address: 43 Exchange Place, New York; home, 270 Park Ave., New York.

Otto Earl Benell

BENELL, OTTO EARL, Chemist; born, Pueblo, Colo., June 17, 1896; son of Walter Scott Benell and Mary Eva (Bartels) Benell; married, Ina Janette Ford, Aug. 15, 1920.

Educated: Public and high schools of Ft. Collins, Colo.; Dec. 20, 1920, B. S., Colorado Agricultural College.

Professional: 1919-1920, Chemist for Great Western Sugar Co., Ft. Collins, Colo.; 1920-1921, Chemist for Great Western Sugar Co., Greeley, Colo.

Aeronautical Activities: Nov. 1917 to Feb. 1918, student observer at Post Field, Ft. Sill, Okla.; Tours, France, at 2nd A. I. C. April 1918; Cazeau, France, Gunnery School, May 1918; French Escadrille Br 9 on Champagne Front, June, July 1918; 135th Aero Squadron, Toul Sector, Battle of St. Mehl, Aug., Sept., Oct., Nov., 1918.

War Service: Army Air Service, May 14, 1918 to Jan. 29, 1919.

Honors: Sept. 12, 1918, at Thiacourt, France, decorated with Distinguished Service Cross.

Present Occupation: Chemist.

Address: Ft. Collins, Colo.

Harold Benington

BENINGTON, HAROLD, Certified Public Accountant; born, England, Dec. 19, 1875; son of William Henry Benington and Rachel (Ward) Benington; married, Lucile Orchard, Mar. 1, 1920.

Educated: High School, Stockton, England; Bedford Grammar School, England; St. Peters School, York, England.

Professional: Five years as apprentice to Chartered Accountant in England; admitted to membership in chartered Institute in 1899; in practice as Certified Public Accountant in Chicago; 1905 to 1921.

Aeronautical Activities: Officer in Charge of Accounts and Auditing, Construction Division, Signal Corps, 1917-1918; Officer in Charge of Finance Branch, Supply Section, Department of Military Aeronautics, 1918-1919; Lt. Col. Air Service.

Member: Institute of Chartered Accountants in England and Wales; American Association of Public Accountants; Union League Club of Chicago.

Present Occupation: Certified Public Accountant.

Address: 140 South Dearborn St.; home, 922 Glengyle Place, Chicago, Ill.

Walter E. Benjamin

BENJAMIN, WALTER E., Representative, U. S. Shipping Board; born, La Crosse, Wis. Feb. 6, 1891; son of Richard Eugene Benjamin and Josephine (Wheeler) Benjamin; unmarried.

Educated: Public schools, La Crosse.

Aeronautical Activities: Special Gosport Cadet, Brooks Field; First Gosport cadet graduated in U. S.; Instructor and Ass't. Engineer Officer, Bolling Field.

Flying Rating: R. M. A.

War Service: 2d Lieutenant, Air Service.

Present Occupation: Traveling Representative U. S. Shipping Board.

Address: Masonic Temple, La Crosse, Wis.

Madison Bentley

BENTLEY, MADISON, Psychologist; born, Clinton, Iowa, 1870; son of Charles Eugene Bentley and Persis Orilla Bentley; married, Emma V. Snelling, 1897.

Educated: Adelphi Academy, Brooklyn, N. Y.; B. S. 1895, University of Nebraska; Ph.D. 1898, Cornell University.

Professional: Banking, 1887-1890; Psychologist, 1898 to date.

Aeronautical Activities: President, Aviation Exam. Board, Cleveland, Ohio, Dec. 1917 to March 1918; President, Aviation Exam. Board, Boston, Mass., Sept. to Dec. 1918; member, Aviation Exam. Board, Los Angeles, Calif., April 1918; attendant, School for Aviators, Adjutants, etc., Columbus, Ohio, May 1918; research officer, Hazelhurst Field, Mineola, N. Y., May to Sept. 1918.

Member: National Arts Club (N. Y.); American Psychological Association.

Present Occupation: Head of Department of Psychology, University of Illinois.

Address: 209 University Hall, Urbana, Ill.

John William Benton

BENTON, JOHN WILLIAM, 1st Lieut., U. S. A.; born, Mantion, Calif., Nov. 27, 1897; son of Thomas Hart Benton and Kate (Lennon) Benton; married, Zelma Alice Carroll, Aug. 8, 1917.

Educated: Redding Grammar Schools; Redding High School; A.B. 1917, University of California.

Professional: Lumberman; aviator.

Aeronautical Activities: Pursuit course, Rockwell Field, Aug. 1918; instructor, pursuit course, Oct. 1918 to Feb. 1919; civilian aviator for R. G. Fowler Airway Development Co., Walter Varney, Bristol Demonstrator, Pacific Coast; U. S. Army Sept. 1920; instructor, March Field, to Feb. 1921; Kelly Field Pursuit.

Flying Rating: Reserve Military Aviator, April 28, 1918; Airplane Pilot.

Member: Pacific Aero Club.

Present Occupation: 1st Lieut., U. S. Army.

Address: 1250 Pine St., San Francisco, Calif.

Emile Berliner

BERLINER, EMILE, Inventor; born, Hannover, Germany, May 20, 1851; son of Samuel Berliner and Sarah (Friedman) Berliner; married, Cora Adler, Oct. 26, 1881.

Educated: Hannover public schools.

Professional: Invented, loose-contact telephone transmitter 1877; disc talking machine 1887.

Aeronautical Activities: Made helicopter experiments since 1903; first to use light weight rotary engine made specially for him for helicopter experiments in the spring of 1908.

Member: Aero Club of America; Aeronautical Society of America.

Present Occupation: Pres. of Washington (D. C.) Society for Prevention of Tuberculosis.

Address: 1458 Columbia Road, Washington,

Henry A. Berliner

BERLINER, HENRY A., Engineer; born, Washington, D. C., Dec. 13, 1895; son of Emile Berliner and Cora (Adler) Berliner.

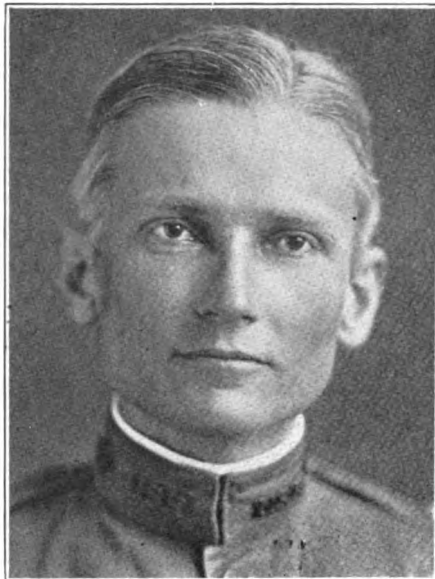
Educated: Public Schools, Washington, D. C.; McKinley Manual Training School, Washington, D. C.; Cornell, 1914-1916; 1918, B. S. in Mechanical Engineering, Mass. Inst. of Tech.

Aeronautical Activities: Designed, constructed, and flew helicopter, 1919; engaged at present in helicopter development.

War Service: Air Service, U. S. Army, 1918-1919, Aerial Photography.

Present Occupation: Experimental Aeronautics.

Address: 1458 Columbia Road, Washington, D. C.

**Hiram Bingham****William Alfred Bevan**

BEVAN, WILLIAM ALFRED, Captain, Air Service; born, Skewen, South Wales, Great Britain, Dec. 11, 1876; son of Alfred Bevan and Margaret (Davies) Bevan; married, Claire Evelyn Wahrer, Dec. 29, 1915.

Educated: Angus, Iowa High School; Perry, Iowa Business College; Bachelor of Science, Iowa State College, 1904; Post Graduate work in Physics, University of Chicago, summer terms of 1905 and 1915; 1921, Master of Science, Massachusetts Institute of Technology.

Professional: Instructor in Chemistry, Iowa State College, 1904-1905; Instructor in Physics; High School, Spokane, Wash., 1905; Civil Service, 1906-1909; Instructor in Physics, Iowa State College, 1909-1912; Instructor and Assistant Professor of Physics, Oregon State College, 1912 to 1918.

Aeronautical Activities: U. S. S. M. A., M. I. T., March to June 1918; Assistant Engineer Officer in charge of the Motor Division, Mather Field, 1918; Engineer Officer, 9th Aero Squadron, on duty at March, Rockwell and Mather Fields, Aug. 1919 to June 1920; Chief Engineer Officer, Rockwell Field, Dec. 1919-April 1920; Chief Inspector of Airplanes and Motors and in charge of special research Rockwell Air Intermediate Depot, Rockwell Field, June-Oct. 1920; Student Officer in Aeronautical Engineering and Thermodynamics, M.I.T., Oct. 1920 to June 1921; observer and assistant pilot in the first DeHavilland Airplane to fly from Mather Field to Portland, Ore. and return, June 8 to 15, 1919; observer and asst. pilot, Trans-Continental Race, 1919.

Flying Rating: Reserve Military Aviator, July 1919; Airplane Pilot.

War Service: Nov. 1917 to date; commissioned 1st Lieut., A.S., Sig. R.C., Feb. 23, 1918; commissioned Captain, Air Service Regular Army, July 1, 1920.

Member: American Association for the Advancement of Science; Society for the Promotion of Engineering Education.

Present Occupation: Captain, Air Service, Chief Engineering Division, Rockwell Air Intermediate Depot.

Address: Rockwell Air Intermediate Depot, Rockwell Field, Calif.

Raymond K. Bevier

BEVIER, RAYMOND K., Instructor of Aeronautics; born, New Ulm, Minn., March 19, 1892; son of Mrs. Elizabeth Bevier.

Educated: Emerson School and North Central High School, Spokane, Wash.; Stanford University.

Aeronautical Activities: March Field, Nov. 1918 to March 1919; teaching aeronautics at Polytechnic Evening School; Instructor, Los Angeles Military Academy.

War Service: 2d Lieut., U. S. Air Service, Feb. 1918 to March 1919.

Present Occupation: Instructor of Aeronautics, Polytechnic Evening High School; Instructor, Los Angeles Military Academy.

Address: 319 S. Grand Ave., Los Angeles, Calif.; home, 702 Alice Ave., Spokane, Wash.

Charles J. Biddle

BIDDLE, CHARLES J., Lawyer; born, Andalusia, Pa., March 13, 1890; son of Charles Biddle and Letitia (Glenn) Biddle.

Educated: Blight School, Philadelphia, Pa.; A. B. 1911, Princeton University; LL. B. 1914, Harvard University.

Professional: Attorney at Law (general practice) 1914-1917; 1919 to date.

Aeronautical Activities: Training in French Aviation Schools, March 24, 1917 to July 28, 1917; in France and Belgium, on front in active service, French Air Service July 28, 1917 to Jan. 12, 1918; on front in U. S. Air Service, Jan. 12, 1918 to Dec. 1, 1919; American Ace, officially credited with destruction of 8 enemy airplanes.

Flying Rating: French Pilote Aviateur (Military) Reserve Military Aviator.

War Honors: U. S. Distinguished Service Cross; two letters of commendation from Commander in Chief, A. E. F.; French Legion of Honor and Croix de Guerre with four palms; Belgian, order of Leopold.

Books: "The Way of the Eagle."

Member: Aero Club of France; Aero Club of America; Princeton Colonial Club; Philadelphia Racquet Club.

Present Occupation: Attorney at Law.

Address: 505 Chestnut St., Philadelphia, Pa.; home, Andalusia, Pa.

Reuben Dallam Biggs

BIGGS, REUBEN DALLAM, 1st Lieut., Air Service; born, Seguin, Tex., Nov. 12, 1895; son of Rev. W. H. H. Biggs and Pattie (Taylor) Biggs; married, Christina Brady, July 8, 1919.

Educated: Coronel Institute, San Marcos, Tex., 1909-1913; Southwest Texas State Normal, 1913-1914; Southwestern University, Georgetown, Tex., 1914-1917.

Professional: Student until entering 1st R.O. T.C. at Leon Springs, Tex.

Aeronautical Activities: Trained on Nieuports at Issoudun, May 18 to July 14, 1918; bombing school at Clermont-Ferrand, July 14 to Sept. 3, 1918; 11th Aero Squadron, 1st Day Bombardment Group, Sept. 3 until Armistice; Air Service Engineering Division, since Armistice until April 13, 1921; Project B., Langley Field, Va., April 13, 1921 to date.

Flying Rating: Reserve Military Aviator, May 15, 1918.

War Service: 1st R.O.T.C., Leon Springs, Tex., May 8, 1917 to Aug. 11, 1917; School of Military Aeronautics, Austin, Tex., Aug.-Oct., 1917; overseas, from Oct. 13, 1917 until March 24, 1918.

War Honors: Official confirmation of destruction of one enemy Pfalz and one Fokker.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Hiram Bingham

BINGHAM, HIRAM, Professor; son of Rev. Hiram Bingham, and Minerva Clarissa (Brewster) Bingham; married, Alfreda Mitchell, Nov. 20, 1900.

Educated: Punahou Preparatory School, 1888-1888; Oahu College, 1888-1892; Phillips Academy, Andover, 1892-1894; A. B., 1898, Yale University; M. A. 1900, University of California; M. A. 1901, Ph. D. 1905, Harvard University.

Professional: Taught History at Harvard, 1902-1905; History and Politics at Princeton, 1905-1906; South American History at Yale, 1907-1917; exploring expedition across Venezuela and Colombia, 1906-1907; across Argentina, Bolivia and Peru, 1908-1909; U. S. Gov't. Delegate to Pan. American Scientific Congress, Chile, 1908; expeditions to Peru for Yale and National Geog. Society, 1911, 1912, and 1915.

Aeronautical Activities: Curtiss School, March and April, 1917; pilot's license, April 1917; organized U. S. Schools of Military Aeronautics and O. I. C., May to Nov., 1917; O. I. C., Air Personnel Division in O. C. S. O.; Chief of Personnel in O. C. A. S. A. E. F., 1918; O. C. of 3rd A. I. C. (Issoudun), 1918; on duty in O. D. M. A.; Washington, Jan. to March, 1919.

Flying Rating: Reserve Military Aviator, Aug. 1917.

War Service: Aero Engineer in O. C. S. O., 1917; Commissioned Major, S. O. R. C., June 1917; Commissioned Lt. Col., A. S. S. C., Oct. 1917.

War Honors: Officer Ord de Etoile Noire (French decoration).

Books: "Five Straws"; "Journal of an Expedition Across Venezuela and Colombia"; "Across South America"; "The Monroe Doctrine An Obsolete Shibboleth"; "Vitcos, the Last Inca Capital"; "The Wonderland of Peru"; "An Explorer in the Air Service".

Member: American Flying Club; University Club of New York; Yale Club of New York; Cosmos Club; Chevy Chase Club; Elizabethan Club; Country Club of New Haven; Harvard Club of Boston.

Present Occupation: Prof. of Latin American History at Yale University.

Address: Drawer A, Yale Station; home, 787 Prospect St., New Haven, Conn.

Halsey L. Bingham

BINGHAM, HALSEY L., 1st Lieut., Air Service; born, Peoria, Ill., Nov. 25, 1890; son of William S. Bingham and Ida (Halsey) Bingham.

Educated: Bellflower High School; LL.B., Illinois Wesleyan University.

Professional: Two years prior to service, Attorney at Law.

Aeronautical Activities: Instructor at Rockwell Field during period of war; Nov. 1920, stationed at Langley Field Photographic School.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

William John Bingham

BINGHAM, WILLIAM JOHN, Mechanical and Structural Engineer; born, St. James, Minn., April 16, 1896; son of Ralph A. Bingham and Margaret Bingham; married, Julia M. Huber, Feb. 14, 1921.

Educated: Public schools; 1918, School of Military Aeronautics, University of Illinois.

Professional: Structural and Mechanical Engineer.

Aeronautical Activities: Training at Rich Field, 1918.

Flying Rating: Reserve Military Aviator, Nov. 1918.

War Service: Nov. 1917 to Jan. 1919; commissioned 2nd Lieut., A.S.A., Nov. 1918; commissioned 2nd Lieut., S.O.R.C., A.S., July 1919.

Present Occupation: Mechanical and Structural Engineer.

Address: 732 Euclid St., St. Paul, Minn.

Lester Frank Bishop

BISHOP, LESTER FRANK, Air Mail Pilot; born, Le Roy, Ill., April 12, 1889; son of Frank Bishop and Matilda Elizabeth Bishop.

Educated: Public schools and high school, Le Roy, Ill.

Professional: Clerk, Guard and Bishop Hardware Co., 1908-1909; Yard-Man, C. A. Pierce Lumber Co., 1910; Auto Mechanic 1911-1914.

Aeronautical Activities: Mechanic, Champion Airplane Co., Chicago, 1915; with Eddie Stinson and Robert T. Shank, 1916; Flying Instructor, Chanute and Selfridge Fields, 1917; Instructor in Acrobatics, Rich Field, 1918; Test Pilot Aircraft Production, Detroit, 1918; Air Mail Pilot; Dec. 27, 1918 to Dec. 1, 1919; Commercial Flying to Sept. 15, 1920; Air Mail Pilot to date.

Present Occupation: Air Mail Pilot.

Address: Air Mail Station, Hempstead, L. I., N. Y.; home, 702 Cedar St., Le Roy, Ill.

John Wallis Bishop

BISHOP, JOHN WALLIS, Salesman; born, Berlin, Md., June 8, 1892; son of Claud Pitts Bishop and Florence Gordon (Dilworth) Bishop; married, Otellie Huebner, Dec. 31, 1917.

Educated: Yonkers Public Schools No. 15 and No. 6; Yonkers High School.

Professional: Salesman, surgical specialties, 1913-1917.

Aeronautical Activities: Enlisted, R.F.C., Nov. 20, 1917; England, April 1918; Overseas, Aug. 6, 1918; 66 Squadron, Aug. 14, 1918 to March 1919; civilian flying in Pennsylvania, July-Nov. 1919.

Flying Rating: Scout Pilot, 1st Class.

War Service: Nov. 20, 1917 to March 1919.

Present Occupation: Real Estate Salesman.

Address: 141 West 36 St., New York City; home, 205 West 57 St., New York City.

Clayton Bissell

BISSELL, CLAYTON, 1st Lieut., Air Service; born, Kane, Pa., July 20, 1896; son of Thomas Bissell and Isabelle Bissell.

Educated: Kane High School and Olean High School; LL.B., Valparaiso University.

Professional: Has been an officer since date of graduation with exception of short time with the Gallaudet Aircraft Corp.

Aeronautical Activities: Has been pilot, flight commander, squadron commander, and group commander; duty in office of the Chief of Air Service; Operations Div., Asst. to Gen. Mitchell.

Flying Rating: Junior Military Aviator, Jan. 1918; Airplane Pilot, March 1921.

War Service: On the front as pursuit pilot for four and a half months.

Decorations: Distinguished Flying Cross; Croce di Guerra; Order of Crown.

Present Occupation: 1st Lieut., Air Service.

Address: 114 Janeway Street, Kane, Pa.



Archibald Black

Archibald Black

BLACK, ARCHIBALD, Aeronautical Engineer; born, Inverness, Scotland, October 2, 1888; son of John Black and Marjorie (Robb) Black.

Educated: Public schools in Scotland; Cooper Institute, New York; Cass Technical Institute, Detroit.

Professional: With New York Edison Co., Union Metallic Cartridge Co. (Bridgeport, Conn.), Detroit Edison Co., 1902-1915.

Aeronautical Activities: Curtiss Aeroplane Co., Buffalo, N. Y., 1916; Chief Engineer L.W.F. Engineering Corp., 1917-1918; Engineer in charge of Aeronautical Specifications, Bureau of Construction and Repair, U. S. N., Washington, D. C., 1919-1920; Consulting Aeronautical Engineer with A. & D. R. Black, 1920 to date; August 1917; Consulting Engineer, U. S. Aerial Mail, 1921.

Member: American Soc. Mechanical Eng.; Soc. Automotive Eng.; Amer. Soc. Testing Materials; Amer. Soc. Eng.; Aero Club of Amer.

Present Occupation: Consulting Aeronautical Engineer.

Address: 25 Brixton Road, Garden City, L. I., N. Y.

Charles Galloway Blackard

BLACKARD, CHARLES GALLOWAY, Lawyer; born, Somerville, Tenn., June 21, 1895; son of James Washington Blackard and Louise White Blackard.

Educated: Brownsville High School, Tenn.; A.B. Emory and Henry College, 1917; LL.B., Cumberland University, 1920.

Aeronautical Activities: U.S.S.M.A., Atlanta, July 1 to Aug. 18, 1917; Wilbur Wright Field, Aug. 18 to Dec. 17, 1917; Ellington Field, Dec. 17, 1917 to April 8, 1918; Camp Dick, April 8 to May 2, 1918; Post Field, May 2 to June 7, 1918; Selfridge Field, June 7 to Sept. 9, 1918; overseas, Sept. 16, 1918; 9th Squadron, Nov. 1, 1918; Trier, Germany, Nov. 22, 1918; returned U. S., June 22, 1919; Mitchel Field, June 22 to Aug. 1, 1919; discharged, Aug. 2, 1919.

Flying Rating: R.M.A., March 22, 1918.

War Service: July 1, 1917 to Aug. 2, 1919.

Member: 136th (Tenn. National Guard) Aero Squadron (this squadron federally reorganized Dec. 4, 1921).

Present Occupation: Lawyer.

Address: 420 Stahlman Bldg., Nashville, Tenn.; home, 1610 16th Ave. South, Nashville, Tenn.

Thomas W. Blackburn, Jr.

BLACKBURN, THOMAS W., JR., 1st Lieut., Air Service; born, Cane Hill, Ark., April 26,

1892; son of Thomas W. Blackburn and Virginia Blackburn; married, Mae Casey, Nov. 4, 1920.

Educated: Public schools of Cane Hill, Ark.; two years, college.

Professional: Wagner Electric & Mfg. Co., St. Louis, 1914-1916; Commonwealth Steel Co., 1916-1917.

Aeronautical Activities: Training, R. A. F., Nov. 1917 to April 1918; 56th Squadron, R. A. F. Pilot, July-Aug. 1918; 25th Squadron, A.E.F., Nov. 1918 to April 1919.

Flying Rating: Pursuit Pilot, July 24, 1918.

War Service: As above.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.; home, Cane Hill, Ark.

William Sample Blakeley, Jr.

BLAKELEY, WILLIAM SAMPLE, JR., Banking; born, Asbury Park, N. J., June 7, 1887; son William S. Blakeley and Mae King Blakeley.

Educated: Chester public schools; Haverford School, Haverford, Pa.; B. S. in E., 1910, University of Pennsylvania.

Professional: Trust & Title Insurance Departments of Cambridge Trust Co., Chester, Pa.

Aeronautical Activities: Trained at Kelly Field, Tex., 1918.

Flying Rating: Reserve Military Aviator; Pilot Certificate A. C. A. No. 4228.

War Service: Aviation Section, Signal Corps, Feb. 1918 to April 1919; Cadet at U.S.S.M.A., Ohio State University; 2nd Lieut. Kelly Field; 1st Lieut. AS-ORC.

Member: Union League of Philadelphia; Springhaven Country Club; Aero Club of America; Chester Club; Rose Tree Fox Hunting Club.

Present Occupation: Trust Officer of Cambridge Trust Company, Chester, Pa.

Address: Fifth & Market Sts.; home, 20th & Providence Ave., Chester, Pa.

Thomas Lloyd Blakemore

BLAKEMORE, THOMAS LLOYD, Aeronautical Engineer; born, Vandalia, Ill., March 23, 1891; son of Thomas Howard Blakemore and Mary Jane Blakemore; married, Mary A. Sedgwick, Dec. 27, 1917.

Educated: B.S. in Mechanical Engineering, 1913, Washington University; M.S. in Aeronautical Engineering, 1917, Mass. Inst. of Tech.

Aeronautical Activities: Project Engineer for Class C. Airship, Navy Department, Washington, D. C., 1917-1918; Construction Engineer, Class C. and D. Airships, Goodyear Tire & Rubber Co. and B. F. Goodrich Co., for the Navy Department, 1918-1920; Aeronautical Engineer, Ft. Omaha, Nebr., Charge of Balloon and Airship Development, 1920-1921; Chief Balloon and Airship Branch of Lighter-than-Air Section, in charge of development of lighter-than-air equipment, 1921 to date.

Member: Society of Automotive Engineers; American Association of Engineers; Engineers Club of St. Louis.

Present Occupation: Aeronautical Engineer, Chief Balloon and Airship Branch of Lighter-than-Air Section.

Address: McCook Field; home, P.O. Box 592, Dayton, Ohio.

Harry Harmon Blee

BLEE, HARRY HARMON, Consulting Engineer; born, Santa Ana, Calif., May 13, 1887; son of Robert J. Blee and Jennie (Harmon) Blee; married, Gladys Howard, Dec. 11, 1914.

Educated: Santa Ana Grammar and High Schools; A.B.M.E. 1910, M.E. 1911, Leland Stanford Junior University.

Professional: 1911, Instructor in Mechanical Engineering at Stanford University; 1912, Power Plant Design and Testing, San Francisco and vicinity; 1913-1917, Mechanical and Hydraulic Engineering, California State Department of Engineering; 1920, Water Supply and Irrigation Engineering, California State Department of Engineering; 1921, Consulting Engineer.

Aeronautical Activities: Oct. 26, 1917, entered employ of Aviation Section, Signal Corps, as Aeronautical Mechanical Engineer; duty in Airplane Engineering Department, Equipment Division; Nov. 12, 1917, appointed assistant to the Chief of the Airplane Engineering Department at McCook Field; Feb. 1918, commissioned Captain, Aviation Section, Signal Corps; representative of Airplane Engineering Division at full flight performance tests; May 1918, Chief of Technical Publications and Library Department; Jan. 1919, Chief of Information Branch, Engineering Division; March 1919, Historical Section, Information Group, Air Service; discharged Dec. 1919 and commissioned Major, Air Service, Reserve Corps, United States Army.

War Service: As above.

Member: American Society of Mechanical Engineers.

Present Occupation: Consulting Engineer.

Address: 311 Orange Ave., Santa Ana, Calif.; home, San Juan Capistrano, Calif.

Gideon A. Blewett

BLEWETT, GIDEON A., Topographer; born, Coal Hill, Ark., Dec. 31, 1894; son of Gideon F. Blewett and Francis (Harrison) Blewett.
Educated: Public schools of Higginsville, Mo.; College of Arts and Science, University of Missouri.

Professional: Engineering Department, Missouri, Kansas and Texas Railway, 1916 to date. (1921).

Aeronautical Activities: Enlisted, Oct. 1917; commissioned 2nd Lieut., June 1918; Pursuit Training, 3rd A.I.C., Issoudun, France, A. E. F., 1918; commissioned 2nd Lieut., A.S.R.C., May 1919.

Flying Rating: Reserve Military Aviator, June 1918.

War Service: As above.

Member: American Association of Engineers. (Junior).

Present Occupation: Topographer Railway Location.

Address: Higginsville, Mo.

Clarence Ernest Blodgett

BLODGETT, CLARENCE ERNEST, Student; born, Springfield, Mass., July 28, 1898; son of Elmer Howard Blodgett and Anne Grace (Schermerhorn) Blodgett.

Educated: Preparatory School, Worcester Academy and Clark School, Hanover, N. H.

Aeronautical Activities: Flying training, French army, Camp d'Avord; staff pilot, 2nd A. I. C., Tours, July-Dec. 1918; 258 Aero Squadron, Dec. 1918 to March 15, 1919; commercial flying, 1920, 1922.

Flying Rating: Brevet Militaire, June 29, 1918.

War Service: April 1917 to April 22, 1919.

Honors: American Field Service Medal from French government.

Member: American Field Service Association.

Present Occupation: Student in Dartmouth College.

Address: Phi Gamma Delta House, Hanover, N. H.; home, 110 Keith St., Springfield, Mass.

Richard Reginald Blythe

BLYTHE, RICHARD REGINALD, Commercial Aviation; born, Wapella, Saskatchewan, Canada, Feb. 8, 1894; son of G. Percy Blythe and Margaret Louise Blythe.

Educated: 1908-1913, Victoria High School and "Westward Ho" College, Edmonton Alberta Canada.

Professional: 1916, Manager, Morrison Garage Co., Santa Barbara, Calif.; partner, Blythe e Hijo Automobile Accessory Imports to Cuba; 1917-1918, Public Accountant, Deloitte Plender, Griffiths & Co., Havana, Cuba; 1919-1920, Travelling Auditor Cuba Cane Sugar Corp.; 1920 to date, Aircraft Insurance Manager, Johnson & Higgins, New York.

Aeronautical Activities: Represented Aircraft Insurance Brokers of New York on Aerial Demonstration Flights over New England during March to July 1921; Official Insurance Observer on first aerial circumnavigation of Great Lakes; Aeronautical Investigator, Lloyds Insurance Co. of London, England; Organized Aeronautic Executives Luncheon.

War Service: Canadian Infantry 50th Gordon Highlanders, Feb.-Dec. 1915; Royal Air Force, 1918.

Member: Country Club of Havana; American Club of Havana; Aloha Club of California; Aero Club of America; Commercial Aircraftmen's Assn.; Aeronautical Chamber of Commerce.

Present Occupation: Aircraft Insurance Manager, Johnson & Higgins, Insurance Brokers.

Address: 49-51 Wall St.; home, Westover Court, 210 West 44th St., New York City.

Edwin Barton Bobzien

BOBZIEN, EDWIN BARTON, 1st Lieut., Air Service; born, Grants Pass, Ore., Oct. 13, 1896; son of Herman Charles Bobzien and Mattie Louise Bobzien; married Kathleen Samuels Spencer, June 12, 1920.

Educated: Public and high schools of Grants Pass; one year, U. S. Naval Academy.

Aeronautical Activities: School of Military Aeronautics, Austin, Tex., Feb. 1918 to April 1918; Concentration Camp, Dallas, Tex., April 13 to May 1, 1918; primary training, Gerstner Field; commissioned, June 13, 1918; pursuit training, Gerstner Field; instructor of acrobatics and combat, Nov. 1918 to May 1919; instructor of pursuit and primary training, Aug. 1919 to Nov. 1920; assigned to U. S. A. School of Aerial Photography, Nov. 1920.

Flying Rating: Reserve Military Aviator, July 12, 1918; Pursuit Pilot, Oct. 12, 1918; Airplane Pilot.

War Service: Enlisted U. S. Army, Aug. 1917; flying cadet, Feb. 1918 to June 12, 1918; commissioned 2nd Lieut., June 13, 1918; commissioned 1st Lieut., July 1, 1920.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service.
Address: Langley Field, Va.; home, 1725 Arch Ave., West Seattle, Wash.

William Edward Boeing

BOEING, WILLIAM EDWARD, Aircraft Manufacturer; born, Detroit, Mich., Oct. 1, 1881; son of William Boeing and Marie M. (Ortman) Boeing; married, Bertha Potter Paschall, Sept. 27, 1921.

Educated: Public and private schools; two years at Yale University.

Professional: Timber business; 1915 to date, aircraft manufacturing.

Aeronautical Activities: Flying instruction under Glenn L. Martin at Los Angeles, Calif.
War Service: Navy; Lt. (j.g.) U.S.N.R.F., Aviation; (inactive duty on account of airplane manufacturing).

Member: Aero Club of America; Aero Club of Northwest.

Present Occupation: President, Boeing Airplane Co.

Address: 1100 Hoge Bldg., Seattle, Wash.

George Gleason Bogert

BOGERT, GEORGE GLEASON, Dean, Cornell Law School; born, Scotland, S. Dak., June 13, 1884; son of Taylor O. Bogert and Jeanette G. Bogert; married, Lolita E. Metzger, April 6, 1918.

Educated: Gouverneur High School, Gouverneur, N. Y., 1902; Cornell University, A.B., 1906, LL.B., 1908.

Professional: Practiced law, Elmira, N. Y., 1908-1911; taught law, Cornell University, College of Law, 1911-1921; Dean, College of Law, 1921 to date.

War Service: Capt., F.A., Aug. 15, 1917; Maj. and Lieut. Col., J.A.C., Nov. 1917 to June 1919.

Author: Sale of Goods in N. Y. (1912); Trusts (1921); Problems in Aviation Law (1921); Proposed Uniform State Aviation Law (1921).

Present Occupation: Dean, College of Law, Cornell University.

Address: Boardman Hall, Cornell University, Ithaca, N. Y.; home, 711 E. Seneca St., Ithaca, N. Y.

Stanhope Stewart Boggs

BOGGS, STANHOPE STEWART, Air Mail Pilot; born, Tucson, Ariz., April 27, 1895; son of Edward Marshall Boggs and Nell (Sutherland) Boggs.

Educated: Public schools of Oakland and Berkeley, Calif.; private schools; Polytechnic Business College.

Professional: Real Estate; Standard Oil Co., 1915-1917.

Aeronautical Activities: Cadet, Air Service, Sept. 1917; U. S. School of Military Aeronautics, University of California, Feb. 1918; instruction at Kelly Field and Brooks Field and appointed instructor of Flying at Brooks Field, Aug. 1918; discharged, July 15, 1919 and enrolled as Pilot, U. S. Air Mail Service, Aug. 1, 1920 to date.

Flying Rating: Reserve Military Aviator; certificate, Aero Club of America.

War Service: As above.
Member: Allied Fliers Club, Oakland, Calif.; Air Mail Pilots of America.

Present Occupation: Air Mail Pilot.

Address: Air Mail Field, San Francisco; home, 480 Thorn Road, Oakland, Calif., (P. O. Box 549).

Herman V. Boley

BOLEY, HERMAN V., Metallurgical Engineer; born, Cleveland, Ohio, Nov. 13, 1894; son of Ernst Boley and Frida (Roelker) Boley.

Educated: Shaw High School; Case School of Applied Science; B.S. 1920, Met. E., University of Clermont Ferrand, France.

Professional: 1920, Metallurgist, Cromwell Steel Co., Lorain, Ohio; 1921 works Mgr. and Treasurer, Cook Motor Co., Delaware, Ohio; Notary Public, Delaware County.

Aeronautical Activities: Graduated from Columbus Ground School, Aug. 11, 1917; commissioned 1st Lieut., Dec. 1917; overseas, March 4, 1918; with 88th Aero Squadron also in Army of Occupation.

Flying Rating: Pursuit Pilot; Observation Pilot; Reserve Military Aviator, Oct. 1917.

War Service: First Officers Training Camp, Fort Harrison, May 11, 1917; July 2, Air Service; discharged, Aug. 30, 1919.

Member: Aero Club of America; Aero Club of Cleveland; American Institute of Metallurgical Engineers; American Institute for the Advancement of Science; Ohio Lodge 508 F. & A. M.

Present Occupation: Metallurgical Engineer.

Address: Cook Motor Company, Delaware, Ohio; home, 1875 Rosemont Road, East Cleveland, Ohio.

Carlton Foster Bond

BOND, CARLTON FOSTER, 1st Lieut., Air Service; born, Chicago, Ill., July 27, 1893; son of

H. N. Bond and Anna M. Bond.

Educated: Public schools of Berkeley, Calif.
Aeronautical Activities: U. S. Air Service, Feb. 8, 1918 to date.

Flying Rating: Free Balloon Pilot No. 863; Airplane Pilot, March 25, 1920; Balloon Observer, July 17, 1918; Airship Pilot.

Present Occupation: 1st Lieut., Air Service.
Address: Langley Field, Va.; home, 2311 Bowditch St., Berkeley, Calif.

William George Bonelli

BONELLI, WILLIAM GEORGE, Rancher; born, Kingman, Ariz., Nov. 9, 1895; son of George A. Bonelli and Effie Ellen (Tarr) Bonelli.

Educated: Public and high schools of Kingman, Ariz.; A. B., University of Southern California.

Professional: 1916-1918, Manager, mercantile business; 1919 to date, Superintendent, cattle ranch, Chloride, Ariz.

Aeronautical Activities: Flying training at March Field, June 1918 to March 1919.

Flying Rating: Reserve Military Aviator.

Member: Aero Club of America.

Present Occupation: Superintendent, cattle ranch.

Address: Chloride, Ariz.

Henry George Boonstra

BOONSTRA, HENRY GEORGE, Air Mail Pilot; born, Lafayette, Ind., Oct. 30, 1889.

Educated: Lafayette public schools and high school; B.S. 1913, Purdue University.

Professional: Salesman.

Aeronautical Activities: Instructor at Chanute Field, 1918; test pilot at repair depot speedway, Indianapolis, Ind., 1919; commercial flying and passenger carrying, 1920.

War Service: As above.

Present Occupation: Pilot, Air Mail Service.
Address: Air Mail Field, Maywood, Ill.; home, 21 South 26th Street, Lafayette, Ind.

Norman Jay Boots

BOOTS, NORMAN JAY, Major, Air Service; born, New Brighton, Pa., Oct. 11, 1892; son of John S. Boots and Elizabeth (McPherson) Boots.

Educated: New Brighton High School; 1915, U. S. Military Academy.

Professional: One year, 10th U. S. Cavalry; Punitive Expedition in Mexico and Aviation Service; U. S. Army, 1916 to date.

Aeronautical Activities: Training, San Diego, 1916-1917; Commanding Officer, 33rd, 19th, and 47th Aero Squadrons; Officer in Charge of Aerial Gunnery, Selfridge Field, 1918-1919; Commanding Officer, Selfridge Field, 1919-1920.

Flying Rating: Junior Military Aviator, May 1917; Aerial Observer; Airplane Pilot.

Member: Aero Club of America; Detroit Athletic Club; Aeronautical Society of University of Michigan.

Present Occupation: Major, Air Service.

Address: McCook Field, Dayton, Ohio; home, New Brighton, Pa.

Fred Sidney Borum

BORUM, FRED SIDNEY, 1st Lieut., Air Service; born, Winchester, Ill., April 25, 1892; son of Mr. S. D. Borum and Mrs. S. D. Borum; married, Marjorie Kellner, Jan. 23, 1918.

Educated: Four years high school; six months preparatory course.

Aeronautical Activities: Enlisted, Aug. 4, 1917 in A.S.S.O.R.C.; entered Ground School, Austin, Tex., Sept. 1917; completed flying training at Kelly Field and commissioned, Feb. 1, 1918; Primary Instructor during the war at various fields in Texas and Arkansas; promoted to 1st Lieut., Oct. 1918; assigned to the 1st Group Bomb., located at Kelly Field since Sept. 1919 to present date.

Flying Rating: Airplane Pilot.

Present Occupation: 1st Lieut., Air Service.

Address: 42 and W. Okmulgee Ave., Muskogee, Okla.

Warren Bradley Bovard

BOVARD, WARREN BRADLEY, Educator; born, Los Angeles, Calif., July 4, 1885; son of George Finley Bovard and Emma J. (Bradley) Bovard.

Educated: Los Angeles City Schools; 1900-1904, University of Southern California.

Professional: Elected Assistant Treasurer, University of Southern California, 1905; took leave of absence during period of war; elected Business Manager in Jan. 1919; took leave of absence to serve as Executive Secretary to Governor William D. Stephens, (State of California) May 1919; returned to the University, July 1920; elected Comptroller of the University, Dec. 1920 and serving in that capacity at present.

Aeronautical Activities: Kelly Field, Sept. 1917 to Dec. 1917, served on staff of Commanding Officer.

War Service: Office of Chief Signal Officer, member of General Staff from Dec. 1917 to Jan. 1919.

Member: University Club, Los Angeles; Los Angeles Athletic Club; American Legion.

Present Occupation: Comptroller, University of Southern California.

Address: University of Southern California; home, 801 West 34th Street, Los Angeles, Calif.



Samuel S. Bradley

William Lewis Boyd

BOYD, WILLIAM LEWIS, 1st Lieut., Air Service; born, Pittsburgh, Pa., Dec. 23, 1896; son of John Thomas Boyd and Mary (Lewis) Boyd; married, Mary Persus Turck, July 3, 1920.

Educated: Public and high schools of Pittsburgh, Pa.; School of Engineering, University of Pittsburgh.

Aeronautical Activities: Princeton Ground School, 1917; trained at Love Field, Wilbur Wright, Carlstrom, and Langley.

Flying Rating: Pursuit Pilot, July 1918.

War Service: As above.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.; home, 3721 Perrysville Ave., Pittsburgh, Pa.

James Frances Boyle

BOYLE, JAMES FRANCES, Engineer; born, New Haven, Conn., Jan. 19, 1892; son of James Boyle and Josephine (Schneider) Boyle; married, Gertrude Krooner, June 1920.

Educated: Public schools of New Haven; New Haven High School; Yale, Sheffield Scientific School, 1912.

Professional: Building Construction, 1911; Industrial Engineering and Scientific Management with Frank B. Gilbreth, 1912-1913 and 1914 in Germany; Industrial Engineering and Scientific Management with Benedict-Boyle-Stronck, Inc., 1914-1915; same in advisory capacity, 1915-1917.

Aeronautical Activities: Chief Engineer with Connecticut Aircraft Co., 1915 to 1920; Engineer and Pupil of Major Baldwin since 1915 in Lighter-than-Air Craft; Chief Engineer with Major Baldwin on the first Navy Dirigible, 1915-1916; Engineer on various dirigibles and balloons built for the Army and Navy during the war; at present designing and constructing kite balloons, towing airships, blimps and military airships for the Army.

Member: Member, Society of Industrial Engineers.

Present Occupation: Chief Engineer and Works Manager, The Airship Mfg. Co. of America (Lighter-than-Air), Hammondsport, N. Y.

Address: 48 Davis Ave., Hammondsport, N. Y.

George Lewis Bradford

BRADFORD, GEORGE LEWIS, Salesman; born, Winchester, Ky., July 28, 1892; son of Daniel Webster Bradford and Annie Augusta Bradford.

Educated: Winchester Public School; Ph. B. 1911, Bethany College, Bethany, W. Va.

Professional: Salesman, Bloch Bros. Tobacco Co., 1911-1913; Office Supplies (store) 1914-1917.

Aeronautical Activities: U. S. Army Air Service Ground School at Georgia Tech., Sept.-Oct. 1917; Flying School, Nov. to March, Hazelhurst and Gerstner Fields; Dual Instructor, Hazelhurst and Roosevelt Fields 1918 to Aug. 1919; Aerial Mail, Oct. and Nov. 1919.

Flying Rating: Reserve Military Aviator.

Member: Aero Club of America.

Present Occupation: Salesman.

Address: 5950 Avery St., Detroit, Mich.; home, 350 W. Main St., Clarksburg, W. Va.

William Russell Bradford

BRADFORD, WILLIAM RUSSELL, Commercial Aviation; born, Bonham, Tex., April 18, 1895; son of Claude Lane Bradford and Annie (Russell) Bradford.

Educated: Public schools of Bonham, Tex.; three years, University of Wisconsin.

Professional: Student until beginning of the War; automobile business 1919, partner in Bradford Automobile Co.; resigned and entered Cantilever Aero Co.

Aeronautical Activities: Ground School, Austin, Tex., 1917; cadet, Gerstner Field, 1918; appointed instructor in formation flying; transferred to Rockwell Field, Aug. 1918 for gunnery course and was later appointed instructor and test pilot.

Flying Rating: Reserve Military Aviator, May 1918.

War Service: Army Air Service, Aug. 1917 to Jan. 1919.

Member: Aero Club of America.

Present Occupation: Assistant Treasurer, Cantilever Aero Co.

Address: 1269 Broadway, New York City; home, 405 Park Ave., Bonham, Tex.

Follett Bradley

BRADLEY, FOLLETT, Major, Air Service; born, Fort Omaha, Nebr., Feb. 12, 1890; son of Alfred Eugene Bradley and Letitia May (Follett) Bradley; married, Katherine Rising, Aug. 11, 1913.

Educated: Grammar and high schools; U. S. Naval Academy, 1910.

Professional: Navy, 1906-1911; Army, 1911 to date; three years Ordnance Department; six years Field Artillery; one year Air Service.

Aeronautical Activities: Sent first radio message from the Air Nov. 1912; conducted first Artillery shoot from air, Nov. 1912; learned to fly at Mineola, L. I., 1916.

Flying Rating: Airplane Pilot.

War Service: One year in France with 2nd Division; in all battles of 2nd Division including Aug. 1918.

War Honors: Croix de Guerre with palm and bronze star; silver citation star.

Member: Army and Navy Club (Wash.).

Present Occupation: Major, Air Service.

Address: Post Field, Ft. Sill, Okla.



Caleb S. Bragg



Gerald C. Brant

Samuel Stewart Bradley

BRADLEY, SAMUEL STEWART, Aeronautical Industry; born, Medina, Ohio, June 27, 1869; son of John Albro Bradley and Eleanor Todd (Stewart) Bradley; married, Genevieve Cornwell, Dec. 17, 1901.

Educated: Medina High School; Ann Arbor High School; University of Michigan.

Professional: Civil Engineering, 1891; manufacturing and industrial, 1897; merchandising and manufacturing, 1911; Brooklyn Park Department, 1917; Manufacturers Aircraft Association to date.

Aeronautical Activities: General Manager, Manufacturers Aircraft Association; member, American Aviation Mission (European Investigation, 1919); member following sub-committees of National Advisory Committee for Aeronautics: Landing Fields, International Air Navigation; member, sub-committee on commercial aviation of economic liaison committee; member, sectional committee for aeronautical safety code, of the American Engineering Standards Committee; Secretary, special civilian committee on aerial law.

Member: Aero Club of America; Society of Automotive Engineers.

Present Occupation: General Manager, Manufacturers Aircraft Association.

Address: 501 Fifth Ave.; home, 103 East 29th Street, New York City.

William Thomas Brady

BRADY, WILLIAM THOMAS, Efficiency Engineer; born, Anna, Ill., March 12, 1896; son of Albert A. Brady and Mary Ellen Brady.

Educated: Anna High School, 1913; 1917, University of Illinois.

Professional: Efficiency Engineer, Corn Products Refining Co., 1919 to date.

Aeronautical Activities: University of Illinois Ground School; Rich Field; Ellington Field; Night and Day Bombing; Instructor, Taliaferro Field; Aerial Gunnery, Garden City, L. I., N. Y.

Flying Rating: Reserve Military Aviator; Aero Club of America License No. 2235.

Present Occupation: Efficiency Engineer.

Address: Corn Products Refining Co., Argo, Ill.; home, Lawton Road, Riverside, Ill.

Caleb S. Bragg

BRAGG, CALEB S.; born, Cincinnati, Ohio, Nov. 23, 1885; son of Caius C. Bragg and Eugenia (Hofer) Bragg.

Educated: B. A. 1908, Yale.

Aeronautical Activities: Started flying in 1914 as sportsman and continued to date.

War Service: Captain, Air Service; experimental pilot and Director of Flying, McCook Field, Dayton, Ohio.

Member: Chairman, Contest Committee, Aero Club of America.

Address: 31 W. 58 St., New York City.

Gerald Clark Brant

BRANT, GERALD CLARK, Major, Air Service; born, Chariton, Iowa, June 29, 1880; son of Clark Thompson Brant and Ellen (Matson) Brant; married, Ethel Frey Cushing, June 17, 1904.

Educated: High school, 1897; U. S. Military Academy, 1904.

Professional: Cadet, U. S. Military Academy, 1899-1904; 2nd Lieut., 9th Cavalry, 1904; 1st Lieut., 10th Cavalry, 1911; Capt., 7th Cavalry, 1916; Major, Aviation Section, Signal Corps, 1917; Lt. Col., Aviation Section, Signal Corps, 1918; Col., Air Service, 1918.

Aeronautical Activities: Junior Military Aviator 1918.

Flying Rating: Airplane Pilot.

War Service: Adj., 2d. Brig., Kelly Field, 1917; Executive Officer, Southern Training Department, 1918; C. O. Kelly Field No. 2, 1918; Chief Operations and Asst Director, Military Aeronautics, Washington, D. C., 1918.

Member: Army and Navy Club (Wash.); Aero Club and Camp Fire Club (N. Y.); Archie Club (Boston).

Present Occupation: Detailed, General Service schools.

Address: Fort Leavenworth, Kans.

Samuel S. Brenner

BRENNER, SAMUEL S., Warehouse Business; born, Philadelphia, Pa., June 30, 1894; son of Louis Brenner and Rose Brenner; married, Rose Sklarovitz, 1890.

Educated: Public schools of Philadelphia; Central High School; Army and Navy Academy, Washington, D. C.

Professional: Wholesale grocery business, 1910-1917; Secretary and General Manager, Eastern Warehouse Company, 1919-1920; President, Brenner-Lesh Co.

Aeronautical Activities: Enlisted Nov. 1917; flying cadet, Jan. 1918; training at Princeton Ground School and Camp Dick, Souther and Kelly Fields; completed Dual, First Solo, Second Solo, Acrobatic, Photography, Wireless, Cross-Country and Formation Stages.

Flying Rating: Reserve Military Aviator.

War Service: As above.

Member: Aero Club of America.

Present Occupation: President, Brenner-Lesh Co.

Address: 1305 Arch St.; home, 1522 Lindley Ave., Philadelphia, Pa.

Sydney Salisbury Breese

BREESE, SYDNEY SALISBURY, Engineer; born, New York City, March 15, 1883; son of James L. Breese and Frances Tileston (Potter) Breese; married, Paula A. Matsner, May 10, 1921.

Educated: Groton School; Harvard University. *Professional:* B. L. M. Motor Car Co., 1906-1907; completed first car in 1901; built first successful step hydroplane boat in U. S., 1909.

Aeronautical Activities: Began experimental work with S. S. Pierce, 1914; built monocoque tractor flying boat, 1915; built several small single-seaters in 1915-1916; Chief Engineer, Breese Aircraft Co., 1917-1918.

**Lewis H. Brereton**

War Service: Lieutenant (J. G.) U. S. N. R. F. 1918-1919.

Member: Harvard Club; Seawanaka Corinthian Y. C.

Present Occupation: Engineer.

Address: 38 East 23 St., New York City.

Lewis Hyde Brereton

BRERETON, LEWIS HYDE, Major, Air Service; born, Allegheny, Pa., June 21, 1890; son of William Henry Brereton and Helen (Hyde) Brereton; married Helen Clason Willis, Feb. 27, 1913.

Educated: St. John's College at Annapolis, Md.; 1911, U. S. Naval Academy.

Professional: Transferred to Army, Aug. 1911 and commissioned 2nd Lieut., Artillery; commissioned 1st Lieut., July 1, 1916; commissioned Captain and Major, Aug. 1917; commissioned Lt. Col. Oct. 28, 1918. Air Service, July 1912 to July 1914, and Dec. 1916 to date.

Flying Rating: Aero Club Pilot License; Aero Club Expert Aviator No. 13, 1913; Military Aviator, March 13, 1913; Junior Military Aviator, July 1, 1917; rated Military Aviator for distinguished service against enemy in action over the front, April 5, 1919.

War Service: C. O. 12th Aero Squadron March 1 to July 1, 1918; Chief, Air Service, 1st Army Corps, Chateau Thierry and Aisne Offensives; Wing Commander, 1st Army, St. Mihiel and Argonne Offensives; Chief of Staff, A. E. F., 3rd Army; Army of occupation, Nov. 11, 1918 to March 15, 1919.

War Honors: Distinguished Service Cross, St. Mihiel, Sept. 12, 1918; Croix de Guerre with Palm, Chateau Thierry, July 1, 1918; Second Palm, July 17, 1918; Legion of Honor, July 17 and 18; Commander, 1st Class, Order of Danillo.

Member: Army and Navy Club; Aero Club of America; Cercle Interallie' (Paris); Aero Club of France; Traveller's Club, Paris.

Present Occupation: Air Attache, American Embassy, Paris.

Address: 5 rue de Chaillot; home, 5 rue du General Lambert, Paris, France.

George Howard Brett

BRETT, GEORGE HOWARD, Major, Air Service; born, Cleveland, Ohio, Feb. 7, 1886; son of William Howard Brett and Alice (Allen) Brett; married, Mary Devol, March 1, 1916.

Educated: Grammar and High Schools of Cleveland, O.; Virginia Military Institute.

Professional: 2d Lt., Philippine Scouts, March 1910 to Aug. 1911; 2d Lt., Cavalry, Aug. 1911 to Oct. 1915.

Aeronautical Activities: Detailed to Aviation Section, Signal Corps, Oct. 1915; Qualified Junior Military Aviator, Sept. 2, 1916; Qualified Military Aviator, Sept. 2, 1919.

Flying Rating: Airplane Pilot.

War Service: Served as Major, Air Service, throughout war; Thirteen months in France.

Present Occupation: Property Division, Supply Group, Air Service.

Address: Care of Office, Chief of Air Service, Washington, D. C.; home, 15 Hesketh St., Chevy Chase, Md.

Mark L. Bristol

BRISTOL, MARK L., Rear Admiral, U. S. Navy; born, Glassboro, N. J., April 17, 1868; son of Mark L. Bristol and Rachel E. Bristol; married, Helen Beverly Moore, June 1, 1908.

Educated: 1887, U. S. Naval Academy.

Professional: Naval Officer.

Aeronautical Activities: In command of U. S. Naval Aeronautics from Dec. 1913 to Dec. 1916, for design and development of all kinds of aircraft and training of personnel.

War Service: Fleet Base, April to July 1917; conveying troop ships, July 1917 to April 1918; Aug. to Oct. 1918, Battleship Division, Ireland; in command of U. S. Naval Base, Plymouth, England at time of Armistice, Nov. 11, 1918.

War Honors: D. S. M.

Member: University Club; Yacht Club; Aero Club (New York); Army and Navy Club (Wash.); Chevy Chase Club.

Present Occupation: U. S. High Commissioner to Turkey and Commander of The U. S. Naval Detachment in Near East since Jan. 28, 1919.

Address: 53 Victoria St., London, England; home, 1621 Massachusetts Ave., Washington, D. C.

Thomas Dohoney Broad

BROAD, THOMAS DOHONEY, Architect; born, Paris, Tex., April 27, 1893; son of Charles I. Broad and Annie (Dohoney) Broad.

Educated: Public schools of Paris, Tex.; B.S. in Architecture, 1915, University of Texas; Harvard Architectural School.

Professional: Architecture since 1916.

Aeronautical Activities: In Supply Dep't at Kelly Field, Maintenance Officer and Assistant Supply Officer.

Flying Rating: Reserve Military Aviator.

Present Occupation: Architect.

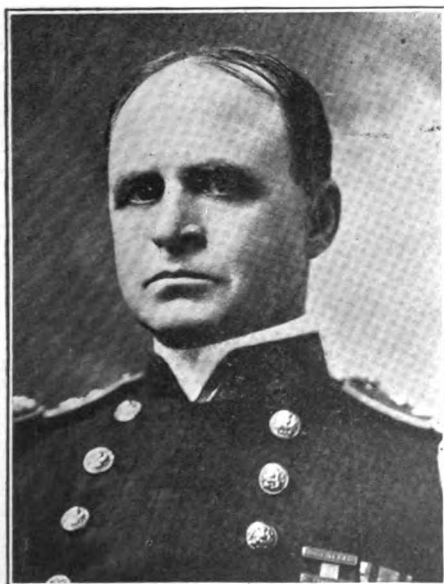
Address: 400 First National Bank Bldg., Kansas City, Mo.

Arthur Raymond Brooks

BROOKS, ARTHUR RAYMOND, Captain, Air Service; born, Framingham, Mass., Nov. 1, 1895; son of Frank Emilien Brooks and Josephine Levasseur Brooks; married, Ruth M. Connery, Sept. 25, 1920.

Educated: Framingham Grammar School and High School, 1900-1913; June 1917, B. S., Mass. Inst. of Tech.

Aeronautical Activities: Trained with U. S. Air Service in Canada, Texas and France, Sept. 1917 to May 1918; Toul Front in May 1918; St. Mihiel and Meuse-Argonne offensives; Flight Commander, Squadron Commander, etc.; flew all types planes in France and U. S.; enlisted Aviation Section, Signal O. R. C., July 23, 1917; flying cadet, School of Mil. Aero. at University of Toronto; flying in Texas (Fort Worth with R. F. C.) and France. (3d A. I. C. Issoudun) R. M. A. test Jan. 26, 1918; 2d Lt., A. S. Signal R. C., Feb. 25, 1918; 1st Lt., A. S., U. S. A., Nov. 6, 1918; Capt. A. S., U. S. A., Feb. 23, 1919; American Expeditionary Forces, France, March 12, 1918 to July 29, 1919; Toul Sector, May 24, 1918; 139th Aero Squadron, 2nd Pursuit Group; St. Mihiel Offensive, Meuse-Argonne Offensive, 22nd Aero Squadron, 2nd Pursuit Group; Flight Commander; Squadron C. O.; American Ace, officially credited with destruction in combat, of six enemy planes, also several unofficial credits; C. O. 95th Aero Squadron 1st Pursuit Group, Oct. 1, 1919 to May 1, 1920; C. O. 1st Pursuit Group, May 1, 1920 to date.

**Arthur R. Brooks****Mark L. Bristol**

Flying Rating: Service rating, R.M.A. Aug. 15, 1921; at present, Airplane Pilot in Air Service.

War Honors: Distinguished Service Cross; also personal citation 1st Army Air Service Commander, Sept. 6, 1918.

Member: Aero Club of America; American Legion; B. P. O. E.; Archie Club of Boston.

Present Occupation: Field Officers School, Langley Field, Va.

Address: Langley Field, Va.; permanent, c/o Adjutant General, U.S.A.

Harold James Brow

BROW, HAROLD JAMES, Lieut., U. S. Navy; born, Fall River, Mass., Dec. 30, 1894; son of Willis H. Brow and Louisa A. Brow.

Educated: Public schools of Providence, R. I.; Technical High School.

Professional: 1914-1917, Machinery designer with the Beaman & Smith Co., Providence, R. I.

Aeronautical Activities: Ground School, Mass. Inst. of Tech., Oct. 1917 to Jan. 1918, flight training (seaplane), 1918; Patrol Pilot, Instructor, Division Commander, Inspection Officer, Assistant Engineer Officer, Naval Air Station, Miami, Fla., May 1918 to July 1919; Experimental Pilot, N.A.S., Hampton Roads, Va., July 1919 to Feb. 1920; Pursuit Course, Carlstrom Field, Arcadia, Fla., Feb. to May 1920; Torpedo-Plane Course, N.A.S., Pensacola, Fla., May to July 1920; Atlantic Fleet Torpedo-Plane Squadron, Hampton Roads and Yorktown, Va., July 1920 to Dec. 1921; piloted Navy Martin Bombers in Bombing Exercises on ex-German battleships, June and July, 1921; Assistant Radio Officer, N.A.S., Anacostia, D. C. to date.

Flying Rating: Naval Aviator No. 571, Feb. 1918; Aero Club of America Certificate Hydro-aeroplane No. 474 and Airplane No. 4171.

War Service: April 1917 to date; commissioned Lieut., U. S. Navy, Dec. 1921.

Member: Army and Navy Club of America (N.Y.C.).

Present Occupation: Lieut., U. S. Navy; Test Pilot, Naval Air Station.

Address: Naval Air Station, Anacostia, D. C.; home, 95 Peace St., Providence, R. I.

Gerald Evans Brower

BROWER, GERALD EVANS, Captain, U. S. Air Service; born, Brooklyn, N. Y., Aug. 25, 1893; son of Daniel K. Brower and Mary Evans Brower; married Melissa D. Hoffman, June 20, 1917.

Educated: Public School, Brooklyn, N. Y.; Boys High School, Brooklyn, N. Y.; C. E. 1916, Cornell University.

Professional: Thomas Bros. Aeroplane Co., 1914-1915; Entered U. S. Army (Field Artillery) Nov. 1916; Served in Air Service, Oct. 1918 to Feb. 1920; July 1920 to present, as Observer, Pilot, Operations Officer, Group Commander, Adjutant, etc.

Aeronautical Activities: Thomas Bros. Aero Co. 1914-1915; Engineer in charge of School U. S. Air Service; Observer, Pilot, Operations Officer, Group Commander, School Adjutant, Student, Field Officers School successively from Oct. 1918 to present.

Flying Rating: Aerial Observer, Feb. 11, 1919; Reserve Military Aviator, July 5, 1919; Airplane Pilot, March 25, 1921.

War Service: Field Artillery to Oct. 1918; Air Service, Oct. 1918 to end.

Member: Various Aero Clubs and Engineering Societies.

Present Occupation: Student, Field Officers School.

Address: Langley Field, Va.

Howard C. Brown

BROWN, HOWARD C., Commercial Aviation; born, Moxahala, Ohio, Sept. 15, 1890; son of William R. Brown and Sarah O. (Alton) Brown; married, Martha M. Tibbetts, June 15, 1921.

Educated: Public schools of Ohio and West Virginia; B. S. E. E. 1914, West Virginia University.

Professional: Electrical Engineer for West Penn. Power Co., 1914-1917; designer for S. Discher & Sons, 1917; designer for Stone & Webster, 1919-1920.

Aeronautical Activities: Princeton Ground School, 1918; flying cadet, Love Field; advanced training at Love Field; bombing course, Ellington Field, 1918; civilian flying, 1919; Air Mail Pilot, July 1920 to date.

Flying Rating: Reserve Military Aviator.

War Service: Army, Nov. 1917 to Jan. 1919.

Member: President, Air Mail Pilots of America.

Present Occupation: Air Mail Pilot, Chicago-Omaha Division.

Address: Air Mail Field, Maywood, Ill.; home, 1626 Kanawha St., Charleston, W. Va.

Roy Stuart Brown

BROWN, ROY STUART, Major, Air Service; born, Minneapolis, Minn., Dec. 22, 1888; son of Seba Smith Brown and Anne Elizabeth (Anderson) Brown.

Educated: Madison Grammar School and Central High School, Minneapolis, Minn.; 1908, U. S. Military Academy; 1 year, University of Minnesota.

Professional: Enlisted in 15th U. S. Cavalry, March 1911; private, corporal, and sergeant; commissioned 2nd Lieut., Cavalry, Nov. 30, 1912.

Aeronautical Activities: Flying training, San Diego, Calif., 1915; 1st Aero Squadron in Mexico, 1916; examining board and school for pilots, 1917; experimental work, Sept. 1917 to Aug. 1918; commanding 2nd wing, Dec. 1918 to March 1919; Philippine Islands, Oct. 1919 to March 1921.

Flying Rating: Junior Military Aviator, 1916; Military Aviator, 1919.

War Service: In charge of pilots school and experimental work during the war.

Present Occupation: Army Officer.

Address: Adjutant General of the Army, Manila, P. I.

E. Garnsey Brownell

BROWNELL, E. GARNSEY, Physician; born, Clifton Park, N. Y., June 1, 1876; son of German Brownell and Delia (Lockwood) Brownell.

Educated: Ballston Spa High School; A.B. 1900, Union College; M.D. 1908, Columbia University.

Professional: Physician; Alumnus, Roosevelt Hospital; connected with Roosevelt Hospital, Bellevue, and Cornell Medical College.

Aeronautical Activities: Surgeon to the First Reserve Squadron, the first and only reserve squadron organized and the first to go overseas; later, Senior Medical Officer, Air Service, A. E. F.

War Service: Enlisted, May 1917, Lt., M.C. A.S.; discharged, Sept. 1919, Lt. Col., M.C.A.S.

Member: Aero Club of America; Army and Navy Club; Columbia University Club.

Present Occupation: Physician.

Address: 132 East 60th St., New York City.

Frank Milton Browning

BROWNING, FRANK MILTON, Automobile Business; born, Ogden, Utah, Oct. 17, 1897; son of J. E. Browning and Mary Browning.

Professional: Storekeeper, Browning Auto Co., Salt Lake City, 1915-1917; Assistant Manager, Browning Auto Co., 1919-1920; Manager, Browning Auto Co., 1920.

Aeronautical Activities: Cadet training and advanced training; 2nd Aviation Inst. Center, Tours, France, Aug. to Nov. 1918.

Flying Rating: Reserve Military Aviator, Nov. 1918.

War Service: U. S. Air Service, Aug. 1917 to June 1919.

Member: Utah Aero Club.

Present Occupation: Manager, Browning Auto Co., Ogden, Utah.

Address: 473-27th St., Ogden, Utah.

Henry A. Bruno

BRUNO, HENRY A., Commercial Aviation; born, London, England, Feb. 7, 1893; son of Henry A. Bruno and Annie (Thompson) Bruno.

Educated: Portland (Prep.) College, London; Montclair, N. J. High School.

Professional: 1914-1915, Advertising Manager, Montclair Herald; 1916-1917, Advertising Manager, American Press, New York; 1919, local Sales Manager, New York City Car Advertising Co.; 1920, Manufacturers Aircraft Association; 1921 to date, Sales and Advertising Manager, Aeromarine Engineering and Sales Co., New York, Aeromarine Airways, Inc.

Aeronautical Activities: 1909, Built and flew world's smallest monoplane glider; 1910-1911, designed, constructed and flew man carrying gliders and motor driven monoplane; 1917, aviation R.F.C., Canada; 1920, assisted in handling publicity for American Aircraft Companies through Manufacturers Aircraft Association; 1921, handled flying boat sales through United States; demonstrated flying boats, made first complete aerial circumnavigation of the Great Lakes.

War Service: January 1917, organized New Jersey Division British American Brigade; pilot, R.F.C.

Books: "The Flying Yankee".

Member: Old Colony Club; American Legion; Hartford Yacht Club (Conn.); Aeronautical Chamber of Commerce.

Present Occupation: Sales and Advertising Manager, Aeromarine Engineering and Sales Co., Aeromarine Airways, Inc.

Address: Times Bldg.; home, Westover Court, 210 West 44th St., New York City.

Ralph Edgar Buckingham

BUCKINGHAM, RALPH EDGAR, Student; born, Davenport, Iowa, June 17, 1896; son of Henry Edgar Buckingham and Amelia Buckingham.

Educated: Public schools of Davenport, Iowa; Coe College, Cedar Rapids, Iowa.

Aeronautical Activities: Ground School, Feb. 1917 to April 1918; training at Barron, Taliaferro and Langley Fields, May 1918 to Jan. 1919.

Flying Rating: Reserve Military Aviator, Sept. 1919.

War Service: Army, May 1917 to Jan. 1919.

Present Occupation: Student.

Address: 232 Washington St., Davenport, Iowa.

Harold R. Buckley

BUCKLEY, HAROLD R., Sugar Business, Cuba; born, Westfield, Mass., April 4, 1896; son of Daniel H. Buckley and Mary A. (McEvoy) Buckley.

Educated: Public schools of Springfield, Mass.; Phillips Andover Academy.

Aeronautical Activities: Flying School at Tours, France, Sept. 1917-Oct. 1917; Flying School at Issoudun, France, Oct. 1917 to Feb. 1918; at Front with 95th Squadron 1st Pursuit Group, Feb. to Dec. 1918; Flight Commander, Aug. 1918 to Nov. 1918.

Flying Rating: Reserve Military Aviator.

War Service: French Ambulance Corps, April to Sept. 1917; Captain, U. S. Air Service.

War Honors: Croix de Guerre; Distinguished Service Cross with Oak Leaf; Aero Club Medal.

Present Occupation: Sugar Business, Cuba.

Address: 103 East 29th St., New York City.

William Fitzhugh Buckner, Jr.

BUCKNER, WILLIAM FITZHUGH, Jr., Merchant; born, Marshall, Mo., Oct. 26, 1888; son of Charles Madison Buckner and Daisy (Potter) Buckner.

Educated: Marshall High School; A.B. 1910, University of Missouri.

Professional: Merchant and traveling salesman, 1910-1920.

War Service: A.E.F. Supply Officer, 1st Corps Observation Training Center; Supply Officer, Day Bombardment Group, First Army A. E.F.

Present Occupation: Merchant.

Address: Slater, Mo.

Noel E. Bullock

BULLOCK, NOEL E., Commercial Aviation; born, Franklin, Nebr., March 31, 1899; son of Guy B. Bullock and Mary E. Bullock.

Educated: Public schools of Madrid, Nebr. and Smith Center, Kans.; Franklin Academy, Franklin, Nebr.

Professional: Automobile business, 1917 to 1921. (Amateur racing).

Aeronautical Activities: Mechanic and Pilot, Victory Flyers, Nov. 1919 to July 1920; Chief Engineer and Test Pilot, North Platte Aircraft Co., July 1920 to Aug. 1921; owner, Bullock School of Flying, Aug. 1921 to date.

Flying Rating: Commercial Pilot.

Member: Nebraska State Air Association.

Present Occupation: Owner and instructor, Bullock School of Flying.

Address: North Platte, Nebr.

George L. Bumbaugh

BUMBAUGH, GEORGE L., Balloon Manufacturer; born, New Castle, Pa., Jan. 7, 1876; son of Jacob Bumbaugh and Margaret Bumbaugh; married, Cora M. Abbott, Oct. 11, 1900.

Educated: Public schools of New Castle, Pa.; Grove City College.

Professional: Occasional parachute leaps 1898 to 1912; constructed 110,000 cu. ft. balloon 1908; made 4 balloons for Illinois Aero Club, 1907; gave exhibitions with 60 ft. airship 1906-1912; manufacturing balloon equipment for Army and Navy, 1917-1920.

Flying Rating: Spherical Balloon License, No. 21; Aviators Certificate No. 601; Dirigible Balloon License No. 125.

Member: Aero Club of America.

Present Occupation: Manufacturing Balloon Equipment and Aerial Advertising.

Address: 838 W. D. Woodruff Place, Indianapolis, Ind.

Vincent J. Buranelli

BURANELLI, VINCENT J., Aeronautical Engineer; born, Temple, Tex., Nov. 22, 1894; son of V. J. Buranelli and Margaret (Meyers) Buranelli.

Educated: Public Schools, Temple, Tex.; Monterey, Mex. private schools; St. Peter's College, N. J., 3 years.

Professional: Aeronautical Engineer. Educated for Mechanical Eng.

Aeronautical Activities: 1912, experimenting with Gliders with J. Carisi; 1912, built exhibition plane with same associate; designed plane for ABC Exhibition Co.; designer International Aviation Co., 1915; eight months conducting wind tunnel experimenting, Washington, D. C.; Chief Engineer and Superintendent, Continental Aircraft Co.; invented aerial torpedo plane; designed plane for the Brazilian Gov't., 1918; in charge, landing gear production for spares for different types of planes;

learned to fly in 1919, long cross country trips in the west; Chief Engineer and Factory Superintendent, Lawson Airplane Co., Milwaukee, Wis.; in charge of Lawson Airliner during Construction and Chief Engineer on Cross Country trip; 1920, Chief Engineer and Superintendent, Nebraska Aircraft Co., Lincoln, Nebr.; 1921, engaged in designing a 30 passenger plane of original type for Airliner Engineering Co.

Member: Aero Club.
Address: Amityville, L. I.; home, South French Ave., Temple, Tex.

Vernon L. Burge

BURGE, VERNON L., Captain, Air Service; born, Fisher, Ill., Nov. 29, 1888; son of A. T. Burge and Sarah Burge; married, Mary Kraske, Sept. 13, 1920.

Educated: High school and prep. schools, Washington, D. C.

Aeronautical Activities: Began flying in 1912, Wright Pusher in Philippine Islands; first enlisted man to fly in Army; completed pursuit course at San Diego; commanded bombing squadron at Ellington and Kelly Fields; instructor in flying during war.

Flying Rating: Certificate 154, F.A.I.; Junior Military Aviator; Airplane Pilot.

War Service: In service since 1907.

Present Occupation: Captain, Air Service, U. S. Army.

Address: Air Service Communications School, Ft. Sill, Okla.; home, West Lebanon, Ind.

Addison Center Burnham

BURNHAM, ADDISON CENTER, Cotton Business; born, Cambridge, Mass., Oct. 27, 1896; son of Addison C. Burnham and Emily H. (Bright) Burnham.

Educated: Andover; Newton Public Schools; A. B., Harvard, 1919.

Professional: Lockwood-Green, Aug. 1919 to date.

Aeronautical Activities: Ground School, M.I.T., 1917; to England, Oct. 1917; on patrol duty, English Channel, 1918; to France, May 1918; Paimboeuf until after armistice.

Flying Rating: Lieut. (j.g.), U. S. N. R. F. *Honors:* Navy Cross: "For distinguished service in the line of his profession as commanding officer of a dirigible engaged in patrol and convoy flights in the war zone, in which operations he did exceptional work, pushing his flights to the limit of physical and material endurance."

War Service: 1917 to 1919.

Present Occupation: Cotton Business.

Address: c/o Lawton Mills Co., 56 Worth St., New York City; home, 15 Bracebridge Rd., Newton Centre, Mass.

Robert Morris Burt

BURT, ROBERT MORRIS, Student; born, West Newton, Mass., June 27, 1896; son of Edwin Palmer Burt and Harriet Louise (Jerome) Burt.

Educated: Brookline High School; Hotchkiss School; Columbia College (Journalism, 1923).

Aeronautical Activities: Enlisted, Air Service, Aug. 18, 1917; commissioned 2nd Lieut., May 18, 1918; graduated, Issoudun, France, Oct. 13, 1918; aerial gunnery, St. Jean de Monts; 28th Squadron (Pursuit); discharged, Feb. 19, 1919; passenger carrying, Caldwell Bros. Aerial Co., 1920 and Eastern Aircraft Corp., summer 1921.

Flying Rating: R. M. A., Aug. 13, 1918; Brevet Militaire, No. 17619, Aug. 13, 1918.

War Service: Aug. 18, 1917 to Feb. 19, 1919.

Member: New York Athletic Club; Pres., Columbia Aero Club; Sec. Treas., Intercollegiate Flying Association; American Legion.

Present Occupation: Student.

Address: 617 West 115 St., New York City.

Clyde Henry Butler

BUTLER, CLYDE HENRY, Maps; born, Stark County, Ohio, May 4, 1895; son of Ira Newton Butler and Catherine (Albrecht) Butler.

Educated: Jackson Twp. Schools; Canal Fulton High School; Capital University, two years; Ohio State University, two years, 1919.

Professional: Goodyear Tire & Rubber Co., 1919; sold typewriters, Jan. to April 1920; Aerial Transport Corp., April to Aug. 1920; Floyd J. Logan Aviation Co., Aug. to Oct. 1920; Corlett Aero Map Co., Oct. to present time.

Aeronautical Activities: U. S. Air Service, Nov. 1917 to Feb. 1919; Aerial Transport Corp., non flying; Floyd J. Logan Aviation Co. as pilot and salesman; from Oct. 1920 to present time, in charge of flight and photography for Corlett Aero Map Co.

Flying Rating: Reserve Military Aviator.

Member: Cleveland Aviation Club; Aero Club of America.

Present Occupation: Manager, Aerial Department, Corlett Aero Map Co.

Address: 940 Leader News Bldg., Cleveland, Ohio; home, R. F. D. No. 3, Massillon, Ohio.

William Ormond Butler

BUTLER, WILLIAM ORMOND, Captain, Air Service; born, Marshall, Va., Sept. 23, 1895; son of Ormond Butler and Mary (Hume) Butler; married, Helen E. Daniell, April 26, 1917.

Educated: Grammar and high schools, Parkersburg, W. Va.; Wellsville and Marietta, Ohio; 1917, U. S. Military Academy.

Aeronautical Activities: Aerial Observers' course, France, July to Oct. 1917; Aerial Observer, 1st Aero Squadron, Amanty, France; 91st French Balloon Company (Observer), Jan. to March 1918; C. O. and Observer, 2nd American Balloon Company, March to June 1918; in charge instruction, U. S. A. Balloon School, Lee Hall, Va., July 1918 to Oct. 1919; Airship School, Langley Field, Jan. 1921 to date.

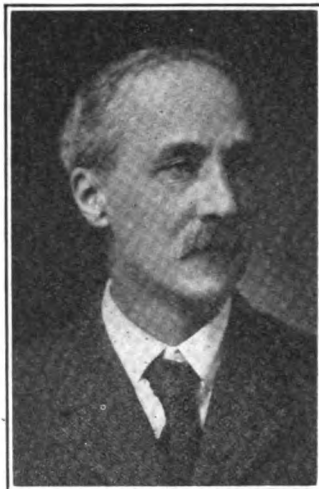
Flying Rating: Balloon Observer; at present qualifying as Free Balloon Pilot and Airship Pilot.

War Service: 6th F. A., June 1917 to Nov. 1917; Balloon Section at Front, Jan. to June 1918; balloon instructor in U. S. to end of war.

War Honors: Croix de Guerre, May 29, 1918.

Present Occupation: Officer, U. S. Air Service.

Address: Langley Field, Va.; home, U. S. E. Repair Depot, Marietta, Ohio.



Godfrey L. Cabot

Arthur Dexter Butterfield

BUTTERFIELD, ARTHUR DEXTER, Educational Director; born, Dunstable, Mass., Oct. 13, 1870; son of Dexter Butterfield and Georgianna (Kenney) Butterfield; married, Fannie Day, Oct. 14, 1898 (died, Jan. 17, 1916); Orpha Lee Howe, June 18, 1921.

Educated: Dunstable, Mass. public schools; Westford Academy, Westford, Mass.; B. S. 1893, M. S. 1898, Worcester Polytechnic Institute; A. M. 1904, Columbia University.

Professional: U. S. lighthouse service, 1893-1894; Instructor in Civil Engineering, Worcester Polytechnic Institute, 1894-1898; Instructor, Asst. Prof. and Prof. of Mathematics and Mechanics, University of Vermont, 1898-1908; Asst. Prof. and Prof. of Mathematics and Geodesy, Worcester Polytechnic Institute, 1908-1920.

War Service: Capt., U. S. Army Air Service, Oct. 14, 1917; Major, Sept. 16, 1918; Lt. Col., Feb. 21, 1919; discharged, Sept. 16, 1919.

War Honors: Chevalier Legion of Honor, April 18, 1919; Order St. Michael and St. George.

Books: History of the Figure of the Earth from Meridian Arc Measurements.

Present Occupation: Educational Director, Norton Co., Worcester, Mass.

Address: 6 New Bond St.; home, 10 Schussler Road, Worcester, Mass.

Alfred James Butterfield

BUTTERFIELD, ALFRED JAMES, Florist; born, Lees Summit, Mo., Dec. 14, 1889; son of Maurice Butterfield and Luvina (James) Butterfield; married, Leanna Richeson Cle, March 21, 1917.

Educated: Public schools of Farmington, Mo.; business college.

Aeronautical Activities: Ground School, University of Illinois, 1918; training at Camp Dick, Scott Field and Paine Field, July 1918 to Jan. 1919.

Flying Rating: Pursuit Pilot.

War Service: As above.

Present Occupation: Florist.

Address: Farmington, Mo.

Richard Evelyn Byrd, Jr.

BYRD, RICHARD EVELYN, JR., Lt. Comdr, U. S. Navy; born, Winchester, Va., Oct. 25, 1888; son of Richard Evelyn Byrd, Sr. and E. (Balling) Byrd; married, Marie O. Ames, Jan. 20, 1915.

Educated: Shenandoah Valley Military Academy of Winchester, Va.; Virginia Military Institute; University of Va.; Naval Academy (Graduate), B. A. Harvard; Graduated Naval Academy in 1912 (previous to this had 2 years at S. J. M. A. and 2 years at V. M. I.).

Aeronautical Activities: Came into aviation Aug. 1917, Pensacola; started first night flying over water, first out of sight of land flying over water; commanding U. S. air forces of Canada, Halifax and North Sydney. In charge navigational preparations, Transatlantic Flights, first two legs; after flight Asst't to Director of Naval aviation.

Flying Rating: Naval Pilot.

War Service: Pensacola, Commanding U. S. Air forces of Canada from July 1918 until Armistice.

War Honors: Silver Star, Aviator's Medal of Merit.

Books: Booklet on "Navigation of the Air."

Member: Army and Navy Club (Wash.); Chevy Chase (Wash.); Racquet Club (Phila.).

Present Occupation: Assistant to Director of Naval Aviation.

Address: Navy Dept., Washington, D. C.; home, 2400 16th St., Washington, D. C.

Godfrey L. Cabot

CABOT, GODFREY L., Manufacturer; born, Boston, Mass., Feb. 26, 1861; son of Samuel Cabot and Hannah Lowell (Jackson) Cabot; married, Maria Buckminster Moors, June 23, 1890.

Educated: Brimmer; Boston Latin; J. P. Hopkinson's Private School; M. I. T., special student, 1877 and 1878; A. B. 1882, Harvard University.

Professional: Analytic and consulting chemist from 1882; manufacturing Gas Regulators, 1886; Carbon Black continuously since 1887; gas producer since 1887; oil producer since 1903.

Aeronautical Activities: Pensacola, April 1916 to Jan. 1917; first flight as pilot, April 12, 1917; Commanding Officer, Marblehead Aviation Camp, April 16, 1917.

War Service: As above.

Member: President, Aero Club of New England; Vice President, Aero Club of America.

Present Occupation: Carbon Black, gas, oil.

Address: 940 Old South Bldg., Boston, Mass.; home, 16 Highland St., Cambridge, Mass.

Frank Waker Caldwell

CALDWELL, FRANK WAKER, Aeronautical Engineer; born, Lookout Mt., Tenn., Dec. 20, 1889; son of Frank Hollis Caldwell and Mary Ella Caldwell; married, Gertrude S. Heisel, Sept. 28, 1918.

Educated: Lookout Mt. High School; Tome School; 1907-1908, University of Virginia; B. S. in M. E., Mass. Inst. of Tech.

Professional: Process Engineer, The Cahill Iron Works, Chattanooga, Tenn., 1912-1916; worked out improvements in the manufacture of porcelain enamelled ware.

Aeronautical Activities: Foreman, Propeller Department, Curtiss Aeroplane Co., Buffalo, N. Y., in charge of all propeller work for U. S. Air Service, 1917-1921; construction of propellers for Curtiss Co. and on Mexican Border; construction of two propeller testing laboratories and supervision of their operation; design of most of the propellers used by the Air Service and many of those used by the Navy during the war.

Member: S. A. E.; Engineer's Club of Dayton.

Present Occupation: Aeronautical Engineer.

Address: McCook Field; home, 835 N. Euclid Ave., Dayton, Ohio.

John Lansing Callan

CALLAN, JOHN LANSING, Commercial Aviation; born, Cohoes, N. Y., June 8, 1886; son of Peter J. Callan and Frances (Jones) Callan.

Educated: Albany Military Academy.

Professional: 1905-1906, National Exchange Bank, Albany, N. Y.; 1907 Commercial Union Co. Operative Bank, Albany, N. Y.; 1908-1910, Standard Oil Co. of New York; 1910 Real Estate business, Albany, N. Y.; 1911-1917, Curtiss Aeroplane Co. 1921, Kenka Industries Inc., Hammondsport, N. Y.

Aeronautical Activities: Commenced flying in 1911, exhibition pilot, demonstrator, and instructor on airplanes and seaplanes from 1912 to 1914; relief pilot and in charge of preparations in Azores for the proposed trans-Atlantic flight of the "America" in 1914; Fall of 1914 to fall

of 1916 Representative in Italy of Curtiss Aeroplane and Motor Corporation; During part of this time acted as instructor and patrol pilot for the Italian Navy and assisted in organization of Naval Flying School at Taranto, and factory in Italy for the manufacture of Curtiss machines; fall of 1916 in charge Curtiss flying school at Buffalo, N. Y.; winter of 1916-1917 Inspector of Army and Navy planes and seaplanes for Curtiss Co. and in connection with Sales Department.

Flying Rating: F.A.I. No. 102, U. S. 1912; F.A.I. No. 318, Hydro, Italy, 1918; F.A.I. Hydro Superior License, Italy, 1918; Naval Aviator, U. S., No. 1442, 1918.

War Service: April to July 1917 Division Officer U.S.S. Seattle, escorting first convoy of troops to France, June, 1917; July 1917 to December 1917 in charge of construction and organization and commanded U. S. Naval Air Stations at Moutchic, Le Cricio, and Ile Tudy, France; December 1917 handled negotiations with Italian Naval Aviation Authorities for the training and operating of U. S. Naval Aviation personnel in Italy; Jan. to April 1918 in charge of training and detail of Naval flying personnel in France, Italy and England; April 1918 to Oct. 15, 1918 Commander of U. S. Naval Aviation Forces in Italy; Oct. 15, 1918 to Feb. 1919 Aide for Aviation in Italy; April 1919 to June 1919 member of Technical, Legal, Commercial and Financial committees for Aviation of the Peace Conference; June 1919 to July 1919 Aide to Naval member of American Aviation Mission to England, France and Italy; joined Naval Reserve Force as Lieutenant in Feb. 1917, promoted Lieutenant Commander March 1918, and to Commander May 1919.

War Honors: United States Navy Cross; Knight of the order of Saints Maurice and Lazzarus, Italy; Italian War Cross; Italian Campaign Medal with two stars; New York State Service and Distinguished Service Medals; Victory Medal.

Member: American Society of Naval Engineers; Aero Club of America; Society of Automotive Engineers; Army and Navy Club (Wash.); Hammondsport Club; American Legion.

Present Occupation: Keuka Industries Inc.

Address: 20 Lake Street, Hammondsport, N. Y.

Douglas Campbell

CAMPBELL, DOUGLAS, Executive; born, San Francisco, Calif., June 7, 1896; son of Wm. Wallace Campbell and Elizabeth B. Campbell.

Educated: Grammar School at Mt. Hamilton, Calif., 1901-1909; The Hotchkiss School at Lakeville, Conn., 1909-1913; A. B. 1917, Harvard University.

Professional: With W. R. Grace & Co., New York.

Aeronautical Activities: Trained at Issoudun, France, Oct. 15, 1917 to Jan. 25, 1918; trained at Cazaux, France, Jan. 28 to Feb. 15, 1918; Flight Comdr., 94th Aero Squadron at front, March 8 to June 5, 1918, when wounded; 7 victories, First American Ace.

Flying Rating: Military Aviator.

War Honors: Croix de Guerre, 3 citations, first citation, April 15, 1918; Chevalier, Legion of Honor; Distinguished Service Cross with four oak leaves.

Member: Harvard Club of New York City; Aero Club of America.

Present Occupation: Secretary to the President, W. R. Grace & Co.

Address: 7 Hanover Street; home, 45 East 55th St., New York City.

John Peters Canfield

CANFIELD, JOHN PETERS, Lumberman; born, Harveyville, Kans., July 17, 1896; son of Henry D. Canfield and Llewellyn (Merriitt) Canfield.

Educated: Public schools of Muskogee, Okla.; one year U. S. Naval Academy.

Professional: Retail lumberman; Manager, Fort Gibson Lumber & Hardware Co., Fort Gibson, Okla., 1920.

Aeronautical Activities: Training at Austin, Tex., School of Military Aeronautics, 1917-1918; flying instruction at Kelly Field and Hazelhurst Field to May 1920.

Flying Rating: Reserve Military Aviator, May 1918.

Present Occupation: Lumberman.

Address: 1670 E. Florence Ave., Los Angeles, Calif.

Robert H. Cannon

CANNON, ROBERT H., Engineer; born, New Brunswick, Canada, April 30, 1891; son of Fletcher B. Cannon and Dorcas A. Cannon.

Educated: Public Schools, Rutland, Mass.; A. B. 1914, Clark University.

Professional: Dennison Mfg. Co., 1914-1916 (Farmington, Mass.); Norton Co., 1916 (Worcester).

Aeronautical Activities: Kelly Field Aug.-Nov. 1917; Berkeley Ground School, Nov. 1917-Feb. 1918; Camp Dick; Call Field, April-Sept. 1918; Ellington Field, Sept. 1918-Jan. 1919.

Flying Rating: 2nd Lieut., Reserve Military Aviator, Call Field, Aug. 6, 1918; 1st Lieut., Reserve Military Aviator.

Present Occupation: Engineer, Norton Co.

Address: 62 Proctor St.; home, New Bond St., Worcester, Mass.

Wadleigh Capehart

CAPEHART, WADLEIGH, Lt. Com. U. S. N.; born, Portsmouth, N. H., Sept. 3, 1888; son of Edward E. Capehart and Sarah W. Capehart; married, Elizabeth Hewlett Scudder, June 10, 1916.

Educated: Rogers High School, Newport, R. I.; U. S. Naval Academy, 1910.

Aeronautical Activities: Detailed to Naval Aviation, May 26, 1914.

Flying Rating: Naval Aviator's Certificate No. 19; Heavier-than-Air Pilot.

War Service: Commanding U. S. Naval Air Station, Fromentine, Vendee, France, April 25, 1918 to Feb. 1, 1919.

Member: Army and Navy Club (Wash.).

Present Occupation: U. S. Navy (Aviation).

Address: Navy Department, Washington, D. C.; home, 112 Willow Street, Brooklyn, N. Y.



Douglas Campbell

Earle Henry Carlisle

CARLISLE, EARLE HENRY, Commercial Aviation; born, Stanley, Wis., Sept. 9, 1900; son of Henry Wood Carlisle and J. F. Carlisle.

Educated: Central High School, Minneapolis, Minn.

Aeronautical Activities: Handley-Page test pilot, Dec. 1919 to June 1920; Exhibition flying and passenger carrying Sept.-Dec. 1920; Instructor, Canadian Air Force, Camp Borden, Dec. 30 to April 1, 1921.

War Service: Flying Cadet (Canada), Sept. 1, 1916 to June 1, 1917; Pilot Officer (England), July 1 to Sept. 1, 1917; Flying Officer (France), Sept. 5, 1917 to Sept. 1, 1918; Flight Lieutenant (Russia) April to Nov. 1919.

Present Occupation: Commercial Pilot.

Address: 3935 Clinton Ave. South, Minneapolis, Minn.

Walter J. Carr

CARR, WALTER J., Aviator; born, Ladd, Ill., Jan. 15, 1896; son of Jay Carr and Lillian Carr.

Educated: Public schools of Illinois.

Professional: Aviation since 1914.

Aeronautical Activities: Flew exhibitions from 1914 to 1917; civilian flying instructor from Oct. 1917 to Dec. 1918; 1918 to 1921, commercial flying.

Flying Rating: Civilian flying instructor, Air Service.

Member: Aero Club of America.

Present Occupation: Aviator.

Address: 365 Malvern Place, Memphis, Tenn.

Paul John Carr

CARR, PAUL JOHN, Postal Clerk; born, Roanoke, Va., April 4, 1892; son of George F. Carr and Maggie Lee (Stump) Carr.

Educated: Stuarts Draft High School; Medical College of Virginia (1 yr.); University of Virginia (1 yr.)

Professional: Clerk, Post Office Department.

Aeronautical Activities: Enlisted R.A.F., Sept. 16, 1917; Leaside, Ont., Feb. 1, 1918; Camp Hicks, Tex., March 1, 1918; commissioned 2nd Lieut., March 16, 1918; final training, Narborough, England, April 30, 1918; aerial gunnery, Buckam Newton, England, Aug. 1, 1918; France, Aug. 15, 1918; attached 107 Squadron (long distance bombing) Aug. 21, 1918; participated in over 50 bombing raids; Gosport Instructors Course, Old Sarem, England, Dec. 3, 1918; course in Wireless Telephony, Lakedown Aerodrome, England, Dec. 14, 1918; Instructor in Wireless Telephony, Dec. 30, 1918 to May 1919; returned to U. S. May 1919; flew Standard J1 in Virginia, July 1921.

Flying Rating: Pilot Aviator's Certificate No. 6314, July 22, 1918.

War Service: Sept. 16, 1917 to May 1919.

Honors: Distinguished Flying Cross, Oct. 1918; "For bravery and devotion to duty in face of heavy odds. Destroyed enemy aircraft in combat, receiving bullet wound in the wrist; crossed enemy lines with a missing engine and maneuvered plane so that two pursuing enemy aircraft were forced down, one out of control, one landing in our lines; by fire from observer's machine gun; landed plane in shell hole and reached our lines under heavy fire"; Croix de Guerre with Palm, for landing plane in German territory and returning safely with French officer, obtaining valuable information of enemy movements."

Member: Royal Aero Club; Aero Club of America.

Present Occupation: Postal Clerk.

Address: R.F.D. Box 79, Waynesboro, Va.

Joseph Henry Carr

CARR, JOSEPH HENRY, Architectural Engineer; born, Mt. Auburn, Iowa, Aug. 14, 1896; son of Joseph Henry Carr, Sr. and Mary Catherine Carr.

Educated: Ames High School; Iowa State College; Ecole des Beaux Arts; B.S. 1921, Mass. Inst. of Tech.

Aeronautical Activities: U. S. Air Service.

Flying Rating: Reserve Military Aviator, 1917.

War Service: Enlisted, May 1917; 1st Lieut., Nov. 1917; Issoudun to 88th Aero, 1st Observation Group, Feb. 1918; assigned to 139th Aero, 2nd Pursuit Group, Sept. 1918; credited with one Fokker, Oct. 29, 1918; commissioned Captain, Dec. 1919.

Member: Aero Club of America; Architectural Club.

Present Occupation: Architectural Engineer.

Address: 1832 Hinman Evanston, Ill.

Franklin Otis Carroll

CARROLL, FRANKLIN OTIS, 1st Lieut., U. S. Air Service; born, Washington, Ind., Feb. 10, 1893; son of Rev. Ewin T. Carroll and Lillie May (Baldwin) Carroll; married, Clara Kathleen Carney, Nov. 26, 1919.

Educated: Public schools, Grayville, Ill. and Benton, Ill. High School; B. S. in Railway Electrical Engineering, University of Illinois.

Professional: Ohio Electric Railway Co., Columbus, Ohio, 1916.

Aeronautical Activities: Cadet, U. S. Air Service, Signal Corps, July 1917 to Jan. 1918; instructor in flying 1918-1919; commissioned 1st Lieut., Jan. 24, 1918; in charge of Municipal Landing Field Section, Office Chief of Air Service, Washington, D. C., Nov. 1919 to Sept. 1920; courses in Aero. and Radio Engineering, Mass. Inst. of Tech., 1920 and 1921.

Flying Rating: Reserve Military Aviator, Dec. 22, 1917; Airplane Pilot.

War Service: Air Service, July 22, 1917 to date.

Books: Co-Author with Mr. Geo. S. Wheat, Wright Aero Co., "Municipal Landing Fields and Airports", 1920.

Present Occupation: Army Student, M. I. T.

Address: Mass. Inst. of Tech., Cambridge, Mass.; home, 29 Queensberry St., Boston, Mass.

Philip A. Carroll

CARROLL, PHILIP A., Lawyer; born, Baltimore, Md., May 10, 1879; son of John Lee Carroll and Mary Carter (Thompson) Carroll.

Educated: A. B., L. L. B., Harvard University.

Professional: Lawyer.

Aeronautical Activities: 1915 began flying; 1916 Governors Island Aviation School; 1917 Service U. S. Army, A. E. F. to 1919.

Flying Rating: Reserve Military Aviator.

War Service: Service with A. E. F., Aug. 22, 1917 to Feb. 1, 1919; rank Lt. Col.

Member: Aero Club of America.

Present Occupation: Lawyer.

Address: 55 Wall St., New York City; home, 142 East 30th St., New York City.

Thomas G. Cassady

CASSADY, THOMAS G., Investment Banking; born, Spencer, Ind., Jan. 5, 1896; son of O. F. Cassady and Edith (Gantz) Cassady; unmarried.

Educated: Spencer public and High schools; University of Chicago.

Aeronautical Activities: Trained in French Schools of Avord, Tours, Pau, Plessis Belleville from June 1917 to Dec. 1917; went to French Escadrille, Spad 157, Dec. 1917 as Corporal in French Army; Transferred to American Army April 1918, 1st Lieut.; Returned to Spad 163 in May and served with the French until Sept. 1918, when joined 28th Squadron 3d pursuit as Flight Com.

War Service: Served in Champaign, 1917; Belfort-Vosges, 1917-1918; Chateau Thierry; Second Marne; Champaign 1918; St. Mihiel and Aisne Meuse Argonne.

War Honors: Discharged with rank of Captain; Legion of Honor, (French); Croix de Guerre with three palms and one Gold Star; Distinguished Service Cross with Oak leaf; Medal, Aero Club of America.

Member: University Club (St. Paul); Aero Club (Minneapolis).

Present Occupation: Investment Banking.

Address: Metropolitan Bank Bldg., Minneapolis, Minn.

Benjamin Frederick Castle

CASTLE, BENJAMIN FREDERICK, Banker; born, Portage, Wis., May 11, 1884; son of Frederick G. Castle and Frances (Gould) Castle; married, Winifred A. Walker, June 28, 1907.

Educated: Milwaukee, West Division high school; U. S. Military Academy, West Point.

Professional: U. S. Army Officer, 1907 to Oct. 25, 1919; 2d Lieut., 29th Infantry 1907 to 1914; 1st Lieut. and Capt. 15th Infantry 1914 to 1917; Major Air Service 1917; Lt. Col. Air Service, 1918 to 1919.

Aeronautical Activities: Detail Major Air Service Aug 1917; Construction Division A. S. S. C. selecting and inspecting flying fields, Oct. 1917 to Jan. 1918; Flying instruction and duty, Rockwell Field, Calif. March to July 1918; Control Board, Air Service, Washington, D. C., July 1918 to Feb. 1919; Attached to U. S. Liquidation Commission as Air Service representative, Paris Feb. to July 1919; Aviation Attache, U. S. Embassy Paris, July to Oct. 1919.

Flying Rating: Junior Military Aviator

Member: University Club, (Buffalo, N. Y.), Army and Navy Club (Wash.); Aero Club of America.

Present Occupation: Banker, Irving National Bank, New York.

Address: Irving National Bank, N. Y.; home, New Rochelle, New York.

**Benjamin F. Castle****Joseph L. Cato**

CATO, JOSEPH L., Aeronautical Mechanical Engineer; born, North Yakima, Wash., Feb. 17, 1889; son of Joseph Lee Cato and Mary (Olson) Cato; married, Marguerite E. Workson, April 20, 1918.

Educated: Private schools, Vancouver, Wash.

Professional: Aeronautical experimental work.

Aeronautical Activities: Gliders and motorless flight from 1903 to 1909; built Curtiss type biplane and made first flight Oct. 9, 1909, Sunset Aviation Field, Alameda, Calif.; 1910, built first air-cooled two-cylinder engine 5 in. bore by 5 1/2 in. stroke; April 1910 to April 1913, associated with H. W. Blakeley in building experimental airplanes; April 1913 to Nov. 1915 built two biplanes for sport flying and one four-cylinder 60 hp. water cooled motor for one of these planes; Nov. 1915 to April 1916, employed by Sloane Aeroplane Co. doing experimental work and assistant manager of general assembly; April 1916 to Dec. 1918, employed by L. W. F. Engineering Co. as Aeronautical Experimental Engineer; Dec. 1918 to June 1919, employed by Marlin-Rockwell Corp. to develop a small sporting monoplane and the Cato 72 hp. ball bearing air-cooled motor using the Cato internal cooling system; June 1919 to Dec. 1920, employed by L. W. F. Engineering Co. as Aeronautical Mechanical Engineer to develop a small motor and plane called the Butterfly Sporting Monoplane; May 1921, employed by Engineering Division, Air Service, McCook Field, as Project Engineer and assistant to Capt. Geo. E. A. Hallett in developing air-cooled radial engines.

Member: Aero Club of America; Society of Automotive Engineers.

Present Occupation: Aeronautical Mechanical Engineer, Engineering Division, Air Service, McCook Field.

Address: Home, 885 N. Main St., Dayton, Ohio.

John Randolph Cautley

CAUTLEY, JOHN RANDOLPH, Aeronautical Engine business; born Richmond, Va., Sept. 28, 1883; son of Richard Kingsman Cautley and Lucy (Randolph) Cautley.

Educated: Began in log schoolhouse, White Sulphur Springs, W. Va.; Continued in Maryland, England, France and Italy; Prepared for College, 6 years, Baltimore Polytechnic Institute, Baltimore, Md.; Mechanical Engineer, Cornell University, Ithaca, N. Y.

Aeronautical Activities: 1909, Course in Aerodynamics, Manchester Technical School, Manchester, England; From that time until 1917 interested as hobby only; Aug. 1, 1917 to date, connected with Wright-Martin Aircraft Corporation and Wright Aeronautical Corporation; No flying experience except as passenger; period of war, Washington Representative of Wright-Martin Aircraft Corporation.

Books: Technical articles for English automotive papers.

Member: S. A. E.; A. S. M. E.; Aero Club of America; Cornell Club, (N. Y.); Hamilton Club, Paterson; University Club and Bannockburn Golf Club, (Wash.); Hovenkopf Country Club, Suffern, N. Y.

Present Occupation: Sales Manager, Wright Aeronautical Corporation.

Address: 238 Lewis St., Paterson, N. J.; home, 100 East 17th St., New York.

Noel Chadwick

CHADWICK, NOEL, Industrial Engineer; born, Boston, Mass., Dec. 22, 1894; son of George Whitefield Chadwick and Ida May (Brooks) Chadwick; married, Elizabeth Young, July 12, 1919.

Educated: Noble and Greenough's school, Boston, Mass.; 1917, Harvard University.

Professional: Industrial Engineer with Webb, Kendall & Bruce, Inc.; Cochrane, Harper Co.

Aeronautical Activities: First class for Dirigible Pilots, Akron, Ohio, 1917; Dirigible Officer, Naval Air Stations at Key West, 1918, Montauk, L. I., 1918; Cape May, 1919.

Flying Rating: Naval Aviator; Dirigible Pilot.

War Service: May 1917 to Jan. 1919.

Member: Harvard Club of Boston.

Present Occupation: Industrial Engineer.

Address: 360 Marlboro St., Brookline, Mass.

**Charles DeForest Chandler****Charles De Forest Chandler**

CHANDLER, CHARLES DE FOREST, Lt. Col. Air Service, retired; born, Cleveland, Ohio, Dec. 24, 1878; son of Frank M. Chandler and Effie May (Barney) Chandler.

Educated: Public schools, High School, Case School of Applied Science, Cleveland, Ohio; Army Signal School, Ft. Leavenworth.

Professional: Officer, U. S. Army, 1898-1899 and from Feb. 2, 1901 to date.

Aeronautical Activities: Oct. 22, 1906, first balloon voyage; first airplane flight 1909, with Wilbur Wright; Commanding Officer of first army aviation schools, College Park, Md. and Augusta, Ga., 1911 to 1913; Officer in Charge Aeronautical Division, Signal Office, War Department from Aug. 1917 to May 1918; member of Board of Officers conducting Wright airplane trials at Fort Myer, Va., 1909.

Flying Rating: Qualified Balloon Pilot, 1907; pilot certificate No. 8, Aero Club of America; Aviation Pilot Certificate No. 59, Aero Club of America; Military Aviator, War Department, July 1912; Expert Aviator Certificate No. 5, Aero Club of America.

War Service: Commanding Officer, Army Balloon School, Ft. Omaha, Nov. 1916 to April 1917; Chief, Balloon Division, Washington, April to Oct. 1917; Chief, Balloon Section, A. E. F., France, Nov. 1917 to Feb. 1918; Chief, Balloon and Airship Division, Army Air Service, March 1918 to Oct. 16, 1920.

Member: Aero Club of America; The Lambs; Chevy Chase Club; Army and Navy Club (Wash.); Army and Navy Club (Manila); Cleveland Athletic Club; Military Order Carabao; Military Order Foreign Wars; American Legion.

Present Occupation: Retired Army Officer.

Address: 1424 K St., N. W., Washington, D. C.

Harry August Chandler

CHANDLER, HARRY AUGUST, Air Mail Pilot; born, Maplewood, N. J., Dec. 8, 1893; son of Frank T. Chandler and Augusta Chandler; married, Louise Fleming, July 5, 1917.

Educated: Public schools of Orange, N. J.; Newark Technical School; Pennington.

Professional: Machinist, 1912; 1915-1916, clerical work.

Aeronautical Activities: Aviation Mech. at Hazelhurst Field, Aug. 1916; student pilot, Hazelhurst, Aug. 1917; Instructor, Princeton Ground School, lectures on Theory of Flight, Sept. 1917 to April 1918; Ass't. Cross-Country Stage Commander, Rich Field, April 1918 to Oct. 1918;

student and instructor, Combat at Pursuit School, sign monoplane, 1910-1913; student aviator at Carlstrom Field, Dec. 1918 to June 1919; Air Mail Pilot, Aug. 1920 to date.

Flying Rating: Reserve Military Aviator, Aug. 1917.

War Service: Enlisted, June 1916; 1st Lieut. Casual Officer at American Fields: Hazelhurst, Rich, Dorr, Carlstrom.

Member: Aero Club of America; Air Mail Pilots of America.

Present Occupation: Air Mail Pilot.

Address: Air Mail Service, Cheyenne, Wyo.; home, 269 Maple Place, Mineola, N. Y.

Nathan Brown Chase

CHASE, NATHAN BROWN, Lt. Comdr., U. S. N.; born, Washington, D. C., Sept. 3, 1889; son of Henry Sanders Chase and Susan (Brown) Chase; married, Frances Sullivant Beard, March 20, 1917.

Educated: Grammar and high schools of Washington, D. C.; 1912, U. S. Naval Academy.

Professional: Watch and Division Officer on U. S. S. Georgia, 1912, 1914, and 1915; six months tour of duty on U. S. S. Montgomery under torpedo instruction in 1913; three months tour of duty at Great Lakes Training Station, 1913.

Aeronautical Activities: Instruction at Pensacola, flight instructor, and finally Officer in Charge of Flying, Jan. 1916 to April 1918; Commanding Officer, Naval Air Station, Bay Shore, L. I., 1918-1919; Commanding Officer, Naval Air Station, Brunswick, Ga., Commanding Officer, Naval Air Station, Chatham, Mass., 1919; Test Pilot for Bureau of Construction and Repair, Navy Department, 1920; Test Pilot for Naval Aircraft Factory, 1920; aircraft member of Board of Inspection and Survey, Navy Department and senior member of all aircraft trial boards, Oct. 1920 to date; present duty is to inspect and fly all new aircraft built for the Navy and to pass upon their suitability.

Flying Rating: Naval Aviator No. 37.

War Service: Navy; Officer in Charge of Flying, Pensacola and in command at Bay Shore, L. I.

Member: Army and Navy Club (Wash.).

Present Occupation: Aircraft inspection and testing.

Address: Navy Department; home, 1811 Riggs Place, N. W., Washington, D. C.

Charles Hugh Chatfield

CHATFIELD, CHARLES HUGH, Airplane Engineer; born, Waterbury, Conn., Sept. 8, 1892; son of William F. Chatfield and Mary F. Chatfield; married, Grace M. Scofield, Nov. 10, 1920.

Educated: Crosby High School, Waterbury, Conn.; S.B. 1914, S.M. 1915, Mass. Inst. of Tech.; S.M. 1915, Harvard University.

Professional: American Brass Co., Waterbury, Conn., 1915-1916; Waterbury Tool Co., 1916-1917.

Aeronautical Activities: Naval Aviation School, M.I.T., Dec. 1917 to Jan. 1918; Inspector's School, Buffalo, N. Y., Jan. to April 1918; Office of Inspector of Naval Aircraft, U.S.N., College Point, N. Y., April to Sept. 1918; Aeronautical Engineering course at M.I.T., Oct. 1918 to Feb. 1919; Bureaus of Construction and Repair and Aeronautics, Navy Department, Washington, D. C., Feb. 1919 to Oct. 1921; Wright Aeronautical Corp., Nov. 1921 to date.

War Service: Active duty, U. S. Naval Reserve. Force, Dec. 1917 to Oct. 1921.

Present Occupation: Airplane Engineer, Wright Aeronautical Corp.

Address: c/o Wright Aeronautical Corp., Paterson, N. J.; home, 509 Willow St., Waterbury, Conn.

Clair Eugene Cheney

CHENEY, CLAIR EUGENE, Commercial Pilot; born, Greene, Iowa, Jan. 12, 1889; son of Frank B. Cheney and Florence B. Cheney; married, Mabel E. Knox, Dec. 27, 1911.

Educated: Public schools of Greene, Iowa; Coe College, Cedar Rapids, Iowa.

Professional: Farming 1912-1917; Garage owner and manager, Greene, Iowa, 1919-1920; civilian flying 1921.

Aeronautical Activities: U. S. S. M. A. Univ. of Ill., March 15, to June 15, 1918; Camp Dick, June 15 to July 6, 1918; Carruthers Field July 6 to Oct. 26, 1918; Brooks Field, Nov. 13 to Dec. 16, 1918; Instructor, Kelly Field, Dec. 18, 1918 to Jan. 15, 1919.

Flying Rating: Reserve Military Aviator, Oct. 26, 1918.

War Service: Dec. 15, 1917 to Jan. 15, 1919.

Present Occupation: Civilian flying.

Address: Greene, Iowa.

Arthur Louis Chetlain

CHETLAIN, ARTHUR LOUIS, Salesman; born, Chicago, Ill., Jan. 21, 1894; son of Judge Arthur H. Chetlain and Lottie Chetlain; married, Marcia F. Wood, May 15, 1920.

Educated: Public schools of Chicago.

Aeronautical Activities: Experimental work on biplane gliders and construction of Nieuport de-

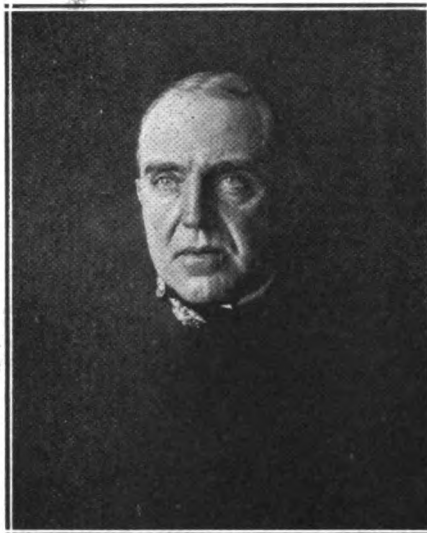
sign monoplane, 1910-1913; student aviator at Miami, 1918-1919; commissioned Ensign, 1919.

Flying Rating: Ensign, U. S. Naval Aviation, April 1919.

War Service: Officers Training School; Sea service from Sept. 1917 to June 1918; transferred to Naval Aviation Service; instruction at M. I. T. Ground School, Miami, Fla., and Pensacola, Fla.

Present Occupation: Salesman, Procter & Gamble Co.

Address: 404 Marion Bldg.; home, 5112 Ravenna Ave., Seattle, Wash.



Harley H. Christy

Frederick Hamilton Chetlain

CHETLAIN, FREDERICK HAMILTON, Student; born, Chicago, Ill., May 26, 1895; son of Judge Arthur Henry Chetlain and Lottie Chetlain.

Educated: Eugene Field and Lake View High Schools; Yale University.

Professional: With The Crane Co., Chicago, for four years.

Aeronautical Activities: Extensive Model Aeroplane experiments, 1908-1911; construction of and numerous experiments with practical 18 and 21 foot gliders, 1911-1913; construction of Nieuport Monoplane, 28 foot spread, 1913; Cadet training at Chanute Field; retired to the Reserve, Feb. 2, 1919 as 2nd Lieut.; advanced flying at Payne Field, Sept., Nov. 1918.

Flying Rating: Reserve Military Aviator, July 1918.

War Service: U. S. S. M. A., Cornell University; served in the 7th Provisional Squadron at Camp Dick; completed gunnery course at the Armorer's School, Wilbur Wright Field.

Member: Aviation Club of Chicago.

Present Occupation: Student.

Address: 796 Yale Station, New Haven, Conn.; home, 7414 Sheridan Road, Chicago, Ill.

John Francis Chetlain

CHETLAIN, JOHN FRANCIS, Student; born, Chicago, Ill., May 26, 1895; son of Judge Arthur Henry Chetlain and Lottie Chetlain.

Educated: Eugene Field School, 1909; Lake View High School, 1913; Washington State College.

Aeronautical Activities: Experimented with model aeroplanes and conducted numerous experiments with gliders, also assisted in building a power machine, 1911-1912-1913; School of Military Aeronautics, Champaign, Ill.; flying training at Rich and Love Fields, March 1918 to Jan. 1919.

Flying Rating: Reserve Military Aviator, Oct. 26, 1918.

War Service: Sept. 1917 to Jan. 1919.

Present Occupation: Student.

Address: College Station, Pullman, Washington; home, 5112 Ravenna Ave., Seattle, Washington.

Kent Gladstone Chetlain

CHETLAIN, KENT GLADSTONE, Student; born, Chicago, Ill., Feb. 13, 1897; son of Judge Arthur H. Chetlain and Lottie Chetlain.

Educated: Eugene Field and Nicholas Senn High Schools; A. B., Northwestern University.

Professional: 1915-1917, Tyler & Hippach Co. (Glass).

Aeronautical Activities: 1908-1911, Experiments with models; experiments with practical gliders, 1911-1912; student aviator, Oct. 1918 to

Feb. 1919; commissioned Ensign, March 1919; on active duty at Great Lakes, Ill., 1919-1920.

Flying Rating: Ensign, Naval Aviator No. 2298.

War Service: Ground School at Mass. Inst. of Tech.; training at Miami; active duty at Great Lakes, Ill.

Present Occupation: Student.

Address: 7414 Sheridan Road, Chicago, Ill.

Godfrey De Courcelles Chevalier

CHEVALIER, GODFREY DE COURCELLES, Lt. Comdr., U. S. Navy; born, Providence, R. I., March 7, 1889; son of Charles N. Chevalier and Elizabeth Ada (Waterhouse) Chevalier; married, Marguerite Jackson, June 14, 1919.

Educated: Public schools of Odgensburg, N. Y. and Medford, Mass.; U. S. Naval Academy.

Aeronautical Activities: Assigned to naval aviation duty, 1912; continued this duty to date.

Flying Rating: Aero Club Hydroaeroplane Certificate No. 5; Naval Aviator No. 7; Aero Club Expert No. 35; French Brevet (Pilote de chasse).

War Service: Nineteen months foreign service during war in France and England; Commanded Naval Air Station, Dunkirk, France, and Naval Air Station, Eastleigh, England; Attached to Grand Fleet to study British fleet aviation.

War Honors: Croix de Guerre; Croix de Guerre with palm; Legion of Honor; U. S. Navy Distinguished Service Medal.

Member: Army and Navy Club; New York Yacht Club.

Present Occupation: Lt. Comdr., U. S. Navy.

Address: U. S. S. Langley, Navy Yard, Norfolk, Va.; home, 88 Summit Road, Medford, Mass.

Arthur Read Christie

CHRISTIE, ARTHUR READ, Major, Air Service, U. S. Army; born, East Orange, N. J., July 29, 1890; son of Arthur Wells Christie and Elizabeth Ellen Christie; married G. de Beaume Jan. 24, 1920.

Educated: Columbia Grammar School; East Orange High School; New York Preparatory school; College of William and Mary, Williamsburg, Virginia, New York University (Law).

Aeronautical Activities: As 2d Lieut. Regular Army started training at Signal Corps Aviation School, San Diego, Calif., Dec. 2, 1914; Passed J. M. A. test, June, 1915; Original member of 1st Aero Squadron and served with this squadron at Fort Sill, Oklahoma, Brownsville, Texas, San Antonio, Texas, and in Mexico; In August, 1916, ordered to Chicago, Ill., to assist in organization of aviation school for reserve officers; June, 1919, appointed member Joint Army and Navy Board on Aeronautics, and Liaison Officer with naval air service.

Flying Rating: Military Aviator, Aviator's Certificate No. 323; Expert's Certificate No. 40.

War Service: C. O. Signal Corps Aviation School, Memphis, Tenn.; C. O. Wilbur-Wright Field, Dayton, Ohio; C. O. 2nd Aviation Instruction Center, Tours, France; C. O. 99th Aero Squadron; C. O. 5th Army Corps Observation Group; Chief of Air Service, 5th Army Corps; Toul Sector, Vosges, St. Mihiel and Meuse-Argonne.

Member: Army and Navy (Wash.); Pi Kappa Alpha and Phi Alpha Delta Fraternities; Military Order of Foreign Wars.

Present Occupation: Commanding Officer, Mitchel Field, Long Island.

Address: Mitchel Field, Mineola, L. I., N. Y.

Harley Hannibal Christy

CHRISTY, HARLEY HANNIBAL, Captain, U. S. Navy; born, Circleville, Ohio, Sept. 18, 1870; son of John W. Christy and Rachel Martha (Oman) Christy; married, Helen Manuel, Sept. 4, 1895.

Educated: Public schools of Ashville, Ohio; 1891, U. S. Naval Academy.

Professional: Served continuously in the Navy. *Aeronautical Activities:* Commandant, Naval Air Station, Pensacola, Fla., Oct. 15, 1919 to date.

War Service: U. S. S. Detroit, Spanish-American War, 1898; U. S. S. Annapolis, Philippine Insurrection, 1903 and 1904, U. S. S. Rainbow, 1904-1906; U. S. S. Salem (in command) Mexican Campaign, 1914; U. S. S. San Diego (in command), Aug. 1917 to July 1918, when vessel was sunk by enemy mine; U. S. S. Wyoming (in command), serving with British Grand Fleet from Sept. 1918 until hostilities ceased.

War Honors: Distinguished Service Medal; citation for meritorious conduct at the time the San Diego was struck by a mine and sunk; Medal commemorating the Naval Engagements in the West Indies; citation for service on U. S. S. Detroit in the bombardment of San Juan, Porto Rico, May 12, 1898.

Member: Army and Navy Club, (Wash.); U. S. Naval Institute.

Present Occupation: Commandant, Naval Air Station, Pensacola, Fla.

Address: U. S. Naval Air Station, Pensacola, Fla.; home, Navy Department, Washington, D. C.

Lawrence S. Churchill

CHURCHILL, LAWRENCE S., Major, Air Service; born, Ogdensburg, N. Y., June 10, 1890; son of John C. Churchill and Mary B. Churchill; married, Bessie Ann Moore, Jan. 17, 1920.

Educated: Public schools, Oswego, N. Y.; Staunton Military Academy; 3 years, Union College.

Professional: Army Officer.

Aeronautical Activities: Training at Aviation School, San Diego, Calif.; General Staff College, A. E. F., 1918; C. O., Souther Field, Nov. 1919 to date.

Flying Rating: Junior Military Aviator; Airplane Pilot.

War Service: 1st Corps Observation Group, Corps Air Service Commander, 8th Army Corps; Commissioned Capt., May 1917; Major, July 1920.

Present Occupation: Commander, Americus Air Intermediate Depot.

Address: Americus, Ga.

Henry Black Clagett

CLAGETT, HENRY BLACK, Major, Air Service; born, Ft. Wayne, Mich., Dec. 19, 1884; son of John Rogier Clagett and Cornelia M. (Black) Clagett.

Educated: Public schools, Cheyenne, Wyo., Denver, Colo., Cincinnati, Ohio; 1906, U. S. Military Academy.

Professional: U. S. Army since July 31, 1902.

Aeronautical Activities: Kelly Field, Tex., Oct. 1917 to May 1918; Rockwell Field, May 1918 to Aug. 1918; Kelly Field, Sept. 1918 to Jan. 1919; Supervisor S. W. District, Jan. to April 1919; Dallas-Boston flight, April to Sept. 1919; Kelly Field, Sept. to Dec. 1919; Air Officer S. E. Dept. and 4th Corps Area since Dec. 1919.

Flying Rating: Junior Military Aviator, 1918; 1920, Airplane Pilot.

Member: Aero Club of America.

Present Occupation: Air Officer 4 Corps Area.

Address: Ft. McPherson, Ga.

Kenneth S. Clapp

CLAPP, KENNETH S., Manufacturing; born, Albion, Ind., Feb. 9, 1893; son of W. F. Clapp and Alice (Smith) Clapp; married, Gladys Pratt, Sept. 8, 1919.

Educated: Albion High School; A. B. 1916, University of Michigan.

Professional: Salesman, 1916; Public Accountant, 1916-1917; Manager, Wayne Oil Tank and Pump Co., Cleveland, Ohio, Jan. 1920 to date.

Aeronautical Activities: S. of M. A., Columbus, Ohio, 1917; R. F. C., 1917-1918; 27th Aero Squadron, U. S. A., 1918-1919; active service, A. E. F. with 27th Aero Squadron, 1st Pursuit Group, U. S. A.; Toul Sector, 1918; Chateau Thierry, St. Mihiel Salient and Meuse Argonne, 1919.

Flying Rating: Airplane Pilot.

War Service: As above.

War Honors: Croix de Guerre with Palm; Distinguished Service Cross.

Present Occupation: Manager, Cleveland office, Wayne Oil Tank and Pump Co.

Address: 1833 E. 13th Street, Cleveland, Ohio; home, 3922 Tacoma Ave., Fort Wayne, Ind.

**Maurice G. Cleary****Virginus Evans Clark**

CLARK, VIRGINUS EVANS, Aeronautical Engineer; born, Uniontown, Pa., Feb. 27, 1886; son of Harry Scott Clark and Sarah McClure Clark; married, Rose U. Stoll, Dec. 20, 1917.

Educated: Public schools Uniontown, Pa.; U. S. Naval Academy (1907); Mass. Inst. of Tech. (P.G.).

Professional: Battleship fleet around world, 1908-1909; with Navy in China 1909; Coast Artillery Corps, Boston, San Francisco, Honolulu, 1910-1912.

Aeronautical Activities: Flying training 1913; Post Graduate course in Aeronautical Engineering, M.I.T., 1914-1915; Chief Aeronautical Engineer, U. S. Army 1915-1920; appointed by President as member National Advisory Committee for Aeronautics, 1916; member Bolling mission to Europe, 1917; promoted to Lt. Colonel, Aug. 5, 1917; member Joint Army and Navy Technical Board for Aeronautics, 1917-1919; Joint Board for Zepelins, 1917; First Commanding Officer, McCook Field, 1917-1918; designed numerous airplanes of various types; supervised other designs; designed practically all U.S.A. wing sections; Vice President, Society of Automotive Engineers, 1922.

Flying Rating: Pilot, 1913; Junior Military Aviator, 1914; Military Aviator, 1917.

War Service: As above.

Member: University Club, Washington, D. C.; Technology Club, New York; Engineers Club, Dayton, Ohio; Miami Hunt and Polo Club, Dayton, Ohio.

Present Occupation: Chief Engineer, Dayton Wright Co.

Address: Shirlton Apts., Dayton, Ohio.

Albert John Cleare, Jr.

CLEARE, ALBERT JOHN JR., Publicity work; born, Toronto, Ontario, Canada, Nov. 15, 1895; son of Albert John Cleare, Sr. and Susie (Troland) Cleare.

Educated: Bryn Athyn Academy, Bryn Athyn, Pa.

Aeronautical Activities: 2nd Lieut. in R.F.C.; sent to Camp Long Branch, Toronto for course in Wireless and Gunnery; S.M.A., University of Toronto; sent to Taliaferro Field for training; 54 combats over lines; Squadron 65 R.F.C., Flanders sector.

Flying Rating: F.A.I. Certificate No. 7262.

War Service: R.F.C., Sept. 1917 to April 1918; R.A.F., April 1918 to July 1919.

War Honors: Officially credited with having destroyed three enemy machines.

Member: Royal Aero Club of the United Kingdom.

Present Occupation: Advertising Dept., Washington Herald.

Address: 1844 Ingleside Terrace, Washington, D. C.

Maurice G. Cleary

CLEARY, MAURICE G.; born, Everett, Wash., 1895; son of Garrett Cleary and T. C. (Doheny) Cleary.

Educated: Andover Academy, Yale University, Ph. B. University of Wisconsin.

Aeronautical Activities: Graduate of all U. S. Air Service Schools; Commanding following organizations: 352 Aero Squadron, 48 Aero Squadron, Mitchel Field; C.O. Mitchel Field; Adjutant Supervisors Branch, Washington, D. C.; Adjutant Air Service Activities, Long Island 1919.

Flying Rating: R. M. A.

War Service: April 1917 to Oct. 1919; Capt. A. S. A.; Major, U. S. Reserve Corps.

Member: Aero Club of America; Aero Club of Northwest; A.S.S.A.; Member Board of Control U.S.A.S.A.; Sigma Chi.

Present Occupation: Merrill Lynch Co.

Address: 11 East 38th St., New York; home, 3222 Grand Ave., Everett, Washington.

Walter Eugene Cleveland

CLEVELAND, WALTER EUGENE, Commercial Aviation; born, Coventry, Vt., April 2, 1895; son of Henry C. Cleveland and Mary G. Cleveland.

Educated: Coventry Grammar; St. Johnsbury Academy; 1913-1914, Cornell University.

Professional: 1920-1921, Hood Rubber Co. and Tel-U-Where Company of America.

Aeronautical Activities: U. S. Air Service, March 1918 to Jan. 1920; served at Wilbur Wright and Payne Fields; organized Cleveland Air Service, Coventry, Vt. in Sept. 1921.

Flying Rating: Reserve Military Aviator; certificate No. 5501.

Present Occupation: Manager and Chief Pilot, Cleveland Air Service.

Address: 488 Main St., Coventry, Vt.

Frederic Gallup Coburn

COBURN, FREDERIC GALLUP, Shipbuilder; born, Duluth, Minn., June 14, 1888; son of Ira Coburn and Minnie H. Coburn; married Ethel Furber Vinal, Dec. 21, 1907.

Educated: Public schools of Duluth, Minn.; U. S. Naval Academy; M. S. 1908, Mass. Inst. of Tech.

Professional: U. S. Navy, 1900-1906; U. S. Navy, Construction Corps, 1906-1919; Bethlehem Shipbuilding Corp., 1919-1921.

Aeronautical Activities: Manager, U. S. Naval Aircraft Factory, 1917-1919.

War Service: Building Seaplanes throughout the war.

War Honors: Navy Cross, Nov. 11, 1920.

Member: American Society of Mechanical En-

**Virginus Evans Clark****Frederic G. Coburn**

gineers; Society of Naval Architects and Marine Engineers; Taylor Society.
Present Occupation: Shipbuilder.
Address: Bethlehem Shipbuilding Corp. Ltd.; home, 1000 Prospect Ave., Bethlehem, Pa.

Howard Earle Coffin

COFFIN, HOWARD EARLE, Automobile Manufacturer; born, West Milton, Miami County, Ohio, Sept. 6, 1873; son of Julius V. Coffin and Sarah Elma (Jones) Coffin; married, Matilda V. Allen, Oct. 30, 1907.

Educated: Public schools of West Milton; high school, Ann Arbor; B. Eng., Eng. D., University of Michigan.

Professional: Early pioneer work with internal combustion engines; built first automobile (steam) in 1899; Chief Engineer, Olds Motor Works, 1902-1905; Vice President and Chief Engineer, E. R. Thomas, Detroit and Chalmers Motor Companies, 1906-1909; 1909 to date, Vice President, Hudson Motor Car Co. Proposed inclusion of aeronautical engineers in S.A.E.; Assisted in organization of association of aircraft manufacturers and working out of cross-licensing of aircraft patents.

Aeronautical Activities: Chairman, Aircraft Production Board; advisory body under Council of National Defense; member of American Aviation Mission.

War Service: Member, Naval Consulting Board, Council of National Defense; Aircraft Production Board.

Member: Aero Club of America; S. A. E.; A. S. M. E.; Detroit Club; Engineers' Club (N. Y.); University Club (Detroit); Metropolitan Club (Wash.); Detroit Athletic Club, Crosse Pointe Country Club, Detroit Boat Club, Bloomfield Hills Country Club.

Present Occupation: Vice President, Hudson Motor Car Co.

Address: Hudson Motor Car Co., Detroit, Mich.; home, Grosse Pointe Shores, Mich.

Joseph George Coffin

COFFIN, JOSEPH GEORGE, Physicist; born, Pittsburgh, Pa., June 14, 1877; son of Warren T. Coffin and Belle V. Coffin.

Educated: Public schools, Lausanne, Switzerland; College Chapin, Paris; B.S. 1898, Mass. Inst. of Tech.; Ph.D. 1903, Clark University.

Professional: Assistant Physics, M. I. T., 1899-1900; Research Assistant, Clark University, 1900-1903; Associate Prof. Physics, College City, N. Y., 1906-1917; Assistant Director, Director Aeronautical Research, Curtiss Engineering Corp., Curtiss Aeroplane and Motor Corp., 1918-1927; Physicist, General Laboratory, U. S. Rubber Co., 1920.

Aeronautical Activities: Researches in Aeronautics, design of wind tunnels and aeronautical balances, new airfoils, maxbombing, ranges, absolute pressure gauge, dynamical stability.

Member: Fellow, A. A. A. S.; Amer. Physical Society; Amer. Mathematical Society; Institute of Radio Engineers.

Present Occupation: Physicist, U. S. Rubber Co.

Address: 58th Street and 11th Avenue, New York City; home, 199 Elizabeth Ave., Hempstead, L. I.

Frank T. Coffyn

COFFYN, FRANK T., Real Estate; born, Charleston, S. C., Oct. 24, 1878; son of George M. Coffin and Julia (Haskell) Coffin; married, Pauline Louise Neff, April 3, 1915.

Educated: Force School and Central High School, Washington, D. C.

Professional: First position with American Security & Trust Co., Washington, D. C., 1899; brokerage business, New York City, 1900-1901; manufacturing, Gordon Battery Co., Treasurer, 1902-1903; manufacturing to 1910.

Aeronautical Activities: Learned to fly at Dayton, Ohio, May 1910; taught by Orville Wright; flew for Wright Co. two years; operated their school of instruction at Augusta, Ga., winter 1911; flew for self 1912 after leaving Wright Co.; took first successful moving pictures from airplane over New York Harbor in Feb. 1912; became test pilot and instructor for Burgess Co., Marblehead, Mass., in Jan. 1913 and remained with them until early 1914, then became their New York representative, 1915-1916.

Flying Rating: Aero Club of America license No. 26.

War Service: Entered Air Service, June 1917; stationed, Mineola, L. I.; Officer in Charge of Flying, Rich Field, Jan. to July 1918; Commanding Officer, Henry J. Damm Field, Aug. to Dec. 1918.

Present Occupation: Real Estate.
Address: 1 West 67th St.; home, 20 West 56th St., New York City.

John Graham Colgan

COLGAN, JOHN GRAHAM, Captain, Air Service; born, Philadelphia, Pa., Dec. 31, 1888; son of Richard A. Colgan and Minnie (Graham) Colgan.

Educated: Treneyffrin public school, Chester Co. Pa.; T. and E. High School, Berwyn, Pa.; one year, Pennsylvania State College; one year, Michigan Agricultural College; one year, University of Illinois.

Aeronautical Activities: Curtiss Flying School, Aug. 1916 to Oct. 1916; enlisted in Signal Reserve Corps, Dec. 30, 1916; instructor, Princeton Flying School, April 1917.

Flying Rating: Reserve Military Aviator, March 15, 1917.

War Service: Active duty, April 14, 1917; foreign service from Aug. 13, 1917 to May 29, 1919.

Present Occupation: Captain, Air Service.
Address: Kelly Field, Tex.; home, Berwyn, Pa.



Howard E. Coffin

Paul F. Collins

COLLINS, PAUL F., Pilot, U. S. Air Mail; born, Wooster, Ohio, April 22, 1891; son of Joseph V. Collins and Jeanette Collins; married, Betsy Robinson, Aug. 2, 1919.

Educated: Public schools of Stevens Point; Wisconsin State Normal School; 1912-1914, University of Wisconsin.

Aeronautical Activities: Graduate University of Illinois Ground School, Oct. 1917; instructor in aerobatics, Ellington Field, Jan. 1918 to Aug. 1918; instructor, Clermont Ferrand, France; Issoudun pursuit school; 138th Aero Squadron; Sales Department, Curtiss Aero and Motor Corp. from Nov. 1919 to Sept. 1920; with Aircraft Fireproofing Corp., as test pilot from Sept. 1920 to Jan. 1921; U. S. Air Mail, Feb. 1921 to present.

Flying Rating: Reserve Military Aviator.

War Service: As above.

Present Occupation: Pilot, U. S. Air Mail.
Address: Air Mail Field, Cleveland, Ohio; home, Stevens Point, Wis.

Charles Herbert Colvin

COLVIN, CHARLES HERBERT, Aeronautical Industry; born, Sterling, Mass., March 4, 1893; son of Fred H. Colvin and Mary (Loring) Colvin; married, Clara S. Soud, Sept. 28, 1918.

Educated: Grammar and high schools, East Orange, N. J.; M.E. 1914, Stevens Institute of Technology.

Professional: Curtiss Motor Co., 1913; Curtiss Aeroplane Co., 1913; Sperry Gyroscope Co., 1914-1919; Pioneer Instrument Co., 1919 to date.

Aeronautical Activities: 1916, Test Engineer; flight tests on instruments, automatic controls and aerial torpedoes.

Member: American Society of Mechanical Engineers; Franklin Institute.

Present Occupation: General Manager (member of firm), Pioneer Instrument Co.

Address: 136 Havemeyer St., home, 61 Poplar St., Brooklyn, N. Y.

William M. Conant, Jr.

CONANT, WILLIAM M., JR., Agriculturist; born, Boston, Mass., March 23, 1891; son of William M. Conant, Sr. and Mary (Benett) Conant; married, Dinsmore Patrick, June 4, 1919.

Educated: Noble and Greenough private school; A.B. 1921, Harvard University.

Professional: 1912-1914, Manufacturing; 1914-1915, accounting; 1915-1917, salesman.

Aeronautical Activities: 1916, 1st Aero Squadron, New York National Guard; 1917, enlisted as cadet; commissioned 1st Lieut., Oct. 1917; overseas, Oct. 1917; finished training as chase pilot at 3rd Aviation Instruction Center, Issoudun, Feb. 1918; appointed tester on airplanes at that field; April 1918 was made chief tester and promoted to Captain, Oct. 1918; returned to U. S. Feb. 1919; promoted to Major, March 1919; on duty until discharge as executive officer, Bolling Field.

Flying Rating: Reserve Military Aviator.
War Service: Air Service, U. S. Army, Aug. 1917 to Aug. 1919.

War Honors: Citation from General Pershing for exceptional, meritorious and conspicuous service in A.E.F.

Member: Harvard Club of New York.

Present Occupation: Agriculturist.

Address: Elkchester, Ky.

Gerald Faulkner Coons

COONS, GERALD FAULKNER, Oil Business; born, Des Moines, Iowa, Feb. 21, 1893; son of Arlan W. Coons and Lida May (Faulkner) Coons.

Educated: Public schools of Des Moines, Iowa, Basin, Wyo.; 1913-1916, University of Wyoming.

Professional: Crude oil production, 1916-1921; 1921, oil well supplies.

Aeronautical Activities: Commissioned 2nd Lieut., Sig. R.C., A.S., Nov. 1917; served at Kelly Field and Rich Field; flying training, Aug. 1918 to Aug. 1919.

War Service: May 1917 to Aug. 1919.

Present Occupation: With National Supply Co.
Address: National Supply Co., Casper, Wyo.; home, Basin, Wyo.

Sylvanus Charles Coon

COON, SYLVANUS CHARLES, Commercial Aviation; born, Fulton County, N. Y., May 29, 1886; son of Charles Sydmore Coon and Nannette (Wilcox) Coon.

Educated: Public and private schools, New York State; 1904-1907, Mechanical Engineering, private school, New York City.

Professional: 1904-1906, Mechanical Superintendent, Fiat Automobile Co.; 1907-1911, Mechanical Superintendent, Palmer-Singer Automobile Co.; 1911-1917, Treas. and Gen. Mgr., Drenco Engineering Corp.

Aeronautical Activities: Captain, Air Service, March 1918 to Aug. 1919; assigned to Call Field as 1st Assistant Engineering Officer, O.I.C. Cadet Gas Engine Instruction; Investigations of Engine and Plane failures for Eng. Division, March to June 1918; appointed Chief Engineer Officer of Mather Field, organized Eng. Dept., received flying training, carried on test, directed improvements of safety nature on training plane in cooperation with Western Dept. B.A.P. and local manufacturers; assigned to overseas duty Nov. 1918; joined Curtiss Aeroplane & Motor Corp., Aug. 1919.

Flying Rating: Reserve Military Aviator.

Member: Aero Club of America; Aeronautical Chamber of Commerce.

Present Occupation: Southwestern representative, Curtiss Aeroplane & Motor Corp.

Address: Love Field; home, Adolphus Hotel, Dallas, Tex.

Harry Depew Copland

COPLAND, HARRY DEPEW, Commercial Aviator; born, Cambridge, Mass., April 17, 1896; son of Henry B. Copland and Grace (Shaw) Copland.

Educated: Public schools, Detroit, Mich.; Rindge Technical School, Cambridge, Mass.; University of Toronto School of Military Aeronautics.

Professional: Radio Telegraphy, 1914-1917.

Aeronautical Activities: Flew glider at Franklin Field, Boston, 1909; assisted in building and flew Curtiss type biplane, Detroit, 1911; built and flew gliders, South Bend, Ind., 1912-1913; enlisted Royal Flying Corps, July 1917; training in Canada; commissioned 2nd Lieut., Dec. 1917 and posted to Talieferro Field as flying instructor in School of Aerial Gunnery; promoted to 1st Lieut., April 1918 and posted Flight Commander School of Aerial Fighting, Beamsville, Ontario; became chief pilot, Universal Aviation Co., July 1919; Nov.-Dec., 1919, flew Buffalo to St. Louis; spring of 1920, visited aeronautical centers of England, Belgium, Holland, and Germany; Dec. 1920-Jan. 1921, flew from Maine to Florida.

Flying Rating: F. A. I. Pilot Certificate, Dec. 1917; British Military (R.F.C.) 1917; British Civilian Certificate No. 83, 1919; State of Conn. License No. 11, 1920.

War Service: Radio Officer, British blockade runners, 1915-1916; flying officer, R.F.C. and R. A.F., 1917-1919.

Member: Institute of Radio Engineers; Aero Club of Mass.; Aero Club of Hartford; American Legion.

Present Occupation: Commercial flying.
Address: 12 Howland St., Cambridge 38, Mass.

James Morgan Corbett

CORBETT, JAMES MORGAN, Commercial Aviator; born, Somerville, Mass., Sept. 15, 1897; son of Martin Corbett and Delia (Ronau) Corbett.

Educated: Chas. G. Pope's School; Somerville, English High School; illness prevented continuation of studies; tutored for examinations for M.I.T.

Aeronautical Activities: Served as flying instructor at various naval stations; Nov. 1919 to March 1920, commercial field as president of North and South American Aircraft Corp.; March to Dec. 1920, vice-president and general manager of Hylo Aeronautical Corp.; at present, vice-president and treasurer of Aero Corps of Massachusetts.

Flying Rating: Ensign, U. S. Naval Aviation, F.A.I. Hydroaeroplane Pilot Certificate No. 724.

Member: Aero Club of America; Aero Club of Massachusetts.

Present Occupation: Vice-President and General Manager, Aero Corp. of Massachusetts.

Address: 750 Fremont Bldg., Boston, Mass.; home, 35 Central Square, Somerville, Mass.

Matt Quay Corbett

CORBETT, MATT QUAY, Engineer; born, Carnegie, Pa., Nov. 17, 1889; son of Col. John H. Corbett and Euphemia (Hope) Corbett.

Educated: Public schools of Allegheny County, Pa.; B.S., 1911, Pennsylvania State College.

Professional: Hydro-Electric Engineer.

Aeronautical Activities: Enlisted, U. S. Navy, April 1917; aviation duty at Pensacola, Section six; assigned to construction and airship school, Akron, Ohio; Student Officer, Oct. 1917; Free Balloon Pilot, Dec. 1917; Airship Pilot, Feb. 1918; Kite Balloon Pilot, May 1918; flying duty at Hampton Roads, Office of Director of Naval Aviation, Washington, 1918; assigned foreign duty to Paimboeuf, France; returned to U. S. on Feb. 1919; assigned to duty, Bureau of C. and R.; inactive duty, March 1919; aeronautical design work at Naval Aircraft Factory, 1920; Air Service design work, Fort Omaha, 1921.

Flying Rating: Naval Aviator, No. 549.

Member: Aero Club of America.

Present Occupation: Acting Chief, Balloon and Airship Section; McCook Field.

Address: 622 N. Main St., Dayton, Ohio; home, Carnegie, Pa.

Irving Pemberton Corse

CORSE, IRVING PEMBERTON, Rancher; born, Minneapolis, Minn., Dec. 19, 1896; son of Irving L. Corse and Susan Evelyn Corse; married, Angela Ritchie Nalle, April 30, 1920.

Educated: Blake School, Minneapolis, Minn.; Phillips Academy, Andover, Mass.; 1919, Certificate of Honor, Yale.

Professional: Ranching since 1919.

Aeronautical Activities: S. of M. A., Champagne, Ill., Aug. 29, 1917; flying training, Canada, Oct. 20, 1917 to Dec. 2, 1917; flying training, Texas, Dec. 2 to Jan. 7, 1918; commissioned 2nd Lieut., Jan. 12, 1918; sailed overseas, Feb. 26, 1918; advanced flying in England; to France and 84th Squadron R. A. F., July 17, 1918; Sept. 5, 1918, wounded in action over Athies, southeast of Peronne, on S. E. 5; Sept. 9, 1918, transferred to 17th U. S. Aero Squadron, on camel, admitted to No. 21 General Hospital, B. E. F. Camiere, France, Sept. 13, 1918 and several more in England and the U. S.; discharged, Jan. 11, 1919, Garden City, L. I., N. Y.

Flying Rating: Reserve Military Aviator, Jan. 12, 1918.

War Service: Aug. 29, 1917 to Jan. 11, 1919; Aug. 25, 1918, 1 Rumpler 2 seater destroyed, in flames; Sept. 7, 1918, 1 balloon destroyed, in flames.

Member: American Legion.

Present Occupation: Ranching.

Address: Bar B. C. Ranch, Teton Post Office, Jackson's Hole, Wyo.

Ralph Pittman Cousins

COUSINS, RALPH PITTMAN, Major, Air Service; born, Mexia, Tex., Dec. 1, 1891; son of R. B. Cousins and Dora (Kelly) Cousins.

Educated: Austin High School, Austin, Tex.; West Texas Normal College; U. S. Military Academy; Yale University.

Professional: Cadet, U. S. M. A., 1911 to 1915; Lieutenant of Cavalry, 1915-1918; student flyer, Aug. 1916 to May 1917; Major, Air Service, July 1917 to date.

Aeronautical Activities: Pilot since 1916; command of the S. M. A., Austin, Tex.; First Day Bombardment Group, Kelly Field, Tex.; member Advisory Board, O.C.A.S., Sept. 1920 to Aug. 1921.

Flying Rating: Junior Military Aviator, April 6, 1917; Airplane Pilot, July 1920.

Member: Army and Navy Club (Wash.); Army and Navy Club (N. Y.); Columbia Country Club; Washington; Aero Club of America.

Present Occupation: Stationed at Sheffield Scientific School, New Haven, Conn.

Address: Sheffield Scientific School, New Haven, Conn.

Benedict Arthur Coyle

COYLE, BENEDICT ARTHUR, 1st Lieut., Air Service; born, Charlottetown, P. E. I., Canada, Oct. 1, 1891; son of Stephen Coyle and Jane Coyle; married, Mable Morgan, May 1, 1921.

Educated: Q. S. S., Canada.

Professional: Bank of Montreal, 1908-1911; United States Trust Co., 1916-1917.

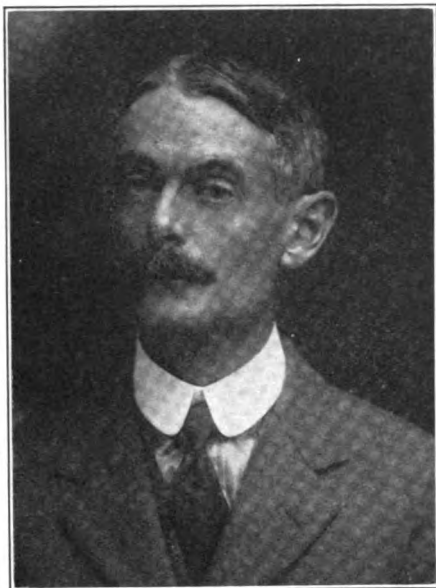
Aeronautical Activities: Training at camps in U. S. and France; with 168th and 1st Aero Squadrons in France and Germany, 1918-1919; 14th Squadron, Langley Field, 1921.

Flying Rating: Airplane Observer.

War Service: Army, Infantry and Air Service, since Aug. 23, 1917.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

**Henry M. Crane****Frank James Coyle**

COYLE, FRANK JAMES, Investment Bonds; born, Chicago, Ill., Nov. 2, 1885; son of Michael O. Coyle and Katherine E. Coyle; married, Betty O'Keefe, Dec. 11, 1915.

Educated: Public Schools; Hyde Park High School; Ph. B., University of Chicago.

Aeronautical Activities: Flew from Jan. 1918 to Aug. 1919; 6th Aero Squadron, Honolulu, H. I.

Flying Rating: Reserve Military Aviator.

War Service: Army.

Present Occupation: Investment Bonds.

Address: 208 LaSalle St.; home, 5823 Dorchester Ave., Chicago, Ill.

Professional: Investment Bonds.

Parker Dresser Cramer

CRAMER, PARKER DRESSER, Commercial Aeronautics; born, LaFayette, Ind., March 16, 1896; son of William Heman Cramer and Fanny (Dresser) Cramer.

Educated: Public schools of Bradford, Pa.

Professional: Flickenger Iron Works, Bradford, Pa., 1911-1913; Dresser Mfg. Co., 1914; Curtiss Aeroplane and Motor Co., Buffalo, N. Y., 1915-1916; Standard Aero Corp., Plainfield, N. J., 1916-1917; Aircraft Fireproofing Corp., Nutley, N. J., 1920; Cramer Flying Field, Clarion, Pa. to date.

Aeronautical Activities: Model experiments, 1908-1910; glider experiments, 1911-1912; field work, 1913-1914; mechanic in Curtiss factory, 1915-1916; Production Engineer, Standard Co., 1916-1917; cadet, instructor and test pilot, U. S. Army, 1917-1919; experimental and commercial flying, 1919; General Superintendent, Aircraft Fireproofing Co., 1920; commercial flying at Cramer Field, Clarion, Pa., 1920 to date.

Flying Rating: Reserve Military Aviator.

War Service: Dec. 1917 to May 1919.

Member: Aero Club of America; Clarion Aero Club.

Present Occupation: Commercial Aeronautics.

Address: Cramer Flying Field, Clarion, Pa.; home, E. Main St., Smithport, Pa.

Henry Middlebrook Crane

CRANE, HENRY MIDDLEBROOK, Consulting Engineer; born, New York City, June 16, 1874; son of Jonathan H. Crane and Elizabeth (Hoadley) Crane.

Educated: Philips Exeter Academy; Bachelor of Science, Mechanical Engineering 1895, Bachelor of Science, Electrical Engineering, 1896, Mass. Inst. of Tech.

Professional: American Tel. & Tel. Co., experimental laboratory, Boston, Sept. 1896 to Nov. 1898; Western Electric Co., New York, Nov. 1898 to May 1906; General telephone experimental and engineering work; during the last year with the Western Electric Co., developed a gasoline launch engine and in summer of 1906 organized the Crane & Whitman Co., later the Crane Motor car Co., and built a factory in Bayonne, N. J.; during the eight years until 1914 developed four models of motor cars, building a number of each model, also the large 8 cylinder engine for the International champion speed boat, Dixie 2, and a second similar engine which with the first formed the twin screw power plant of champion Dixie 4; President and Chief Engineer of these companies; in the winter of 1914-1915 the Crane Motor Car Co. was joined with the Simplex Automobile Co. and he became Vice President and Consulting Engineer of the latter Co.; in the summer of 1916, having returned from France with the rights to build the Hispano-Suiza aeronautical engines, he became Vice President and Chief Engineer of the Wright-Martin Aircraft Corp., which was an amalgamation of the old Wright Co., the Simplex Automobile Co. and the Glenn L. Martin Co.; retained this position until resigned from the Wright Aeronautical Corp., the successor to the Wright-Martin Aircraft Corp. about March 1, 1920.

Aeronautical Activities: Built a small 4 cylinder, water cooled airplane engine about 1912; sent to France in Nov. 1915 to choose an aeronautical engine for manufacture by Simplex Automobile Co.; from 1916 to 1920 engineered the 150 hp. Hispano-Suiza into production, developed and engineered into production the 200 hp. and 300 hp., developed a 200 hp. geared motor, and partly developed a cannon motor; in 1918 joined with G. C. Loening and others in the organization of the Loening Aeronautical Engineering Corp., of which he is still a director; the first work of importance undertaken was the development of a monoplane, two-seater fighter for the Wright-Martin Co. to use the American 300 hp. Hispano.

War Service: Liberty Engine Test Committee, Chairman appointed by Aircraft Board, Jan. 16, 1918.

Member: Chairman of the Technical Committee of the Aero Club of America; Society of Automotive Engineers; Society of Mechanical Engineers; Automobile Club of America; University Club (N. Y.); Piping Rock Club; Engineers Country Club.

Present Occupation: Consulting Engineer.

Address: 44 West 44th St., New York City.

Burgess F. Creeth

CREETH, BURGESS F., Commercial Pilot; born, Los Angeles, Calif., July 14, 1895; son of Frederick G. Creeth and Ida S. Creeth.

Educated: Public schools of Hastings, Nebr. and Long Beach, Calif.; Hastings College; Colorado School of Mines, Golden, Colo.

Aeronautical Activities: Training received at 3rd A. I. C., A. E. F. on Nieuport; Instructor at 3rd A. I. C.; member, 5th Pursuit Group, 638th Spad Squadron; Snyder-Creeth Aero Co., Hastings, Nebr.; Brumley-Creeth Aero Co., Mc. Cook, Nebr.; engaged in commercial and exhibition flying throughout middle west from Aug. 1919 to Jan. 1921.

Flying Rating: Reserve Military Aviator.

War Service: Army Air Service, Aug. 1917 to July 1919; A. E. F. 21 mo.

Member: Aero Club of America; Beta Theta Pi. Tehama Temple.

Present Occupation: Civilian flying; entering Air Mail Service.

Address: 1871 Lime Ave., Long Beach, Calif.

Jesse Orin Creech

CREECH, JESSE ORIN, Commercial Aviator; born, Harlan, Ky., Aug. 22, 1896; son of Wm. Creech and Martha Creech.

Educated: Public schools of the District of Columbia; McKinley Manual Training High School, D. C.; attended University of Kansas and Cornell University.

Professional: Scientific work, U. S. Dept. of Agriculture in Utah; U. S. Shipping Board; Sales Dept. Indian Refining Co., N. Y.

Aeronautical Activities: Canada, July 10, 1917 to Oct. 10, 1917; Texas as instructor, Oct. 15, 1917 to Dec. 15, 1917; England and France, Jan. 19, 1918 to March 10, 1919.

Flying Rating: Reserve Military Aviator.

War Service: Attached to British Flying Corps from July 10, 1917 to Nov. 5, 1918; flew Camels with 148th Squadron at the front; American Ace, officially credited with destruction of 8 enemy airplanes.

War Honors: British Distinguished Flying Cross; recommended for the U. S. Distinguished Service Cross and Oak Leaf; Special citation from Gen. Pershing.

Member: Aero Club of America.

Present Occupation: Mgr. Treas. and Chief Pilot, Lexington Aviation Co.

Address: 352 Madison Place, Lexington, Ky.



Benedict Crowell

Harry B. Crewdson

CREWDSON, HARRY B., Exhibition Pilot; born, Custer Co., Nebr., March 22, 1884; son of E. D. Crewdson and Mary (Muir) Crewdson.

Educated: Public schools and high school.

Professional: Worked for Lord and Thomas Advertising Agency, Chicago, Ill., 2 years; Harper and Bros. Publishers, 3 years; F. B. White Advertising Agency, 2 years; Marshall Field & Co., Chicago, Ill.

Aeronautical Activities: Flying for 10 years; built four machines; flew exhibition for William Pickens, W. F. Barnes Amusement Co., Wilkes Aviators, Robinson Amusement Co., Howell Aviation Co., Western Vaudeville, all Chicago booking agencies, and several others, before the war.

Flying Rating: I. F. of A. license also Expert Pilot's license.

War Service: Civilian flying instructor fall of 1916 to Jan. 1, 1919.

Present Occupation: Carrying passengers, instructing, etc.

Address: Great Northern Hotel, Hot Springs, Ark.

Harrison Gage Crocker

CROCKER, HARRISON GAGE, 1st Lieut., Air Service; born, Wahpeton, N. D., July 4, 1886; son of William Goss Crocker and Sarah B. Crocker; married, Ethel Toye, Dec. 1, 1920.

Educated: High school.

Professional: Publishing business, 1907 to 1912; mechanical foreman, 1912 to 1917.

Aeronautical Activities: Gosport instructors course, Kelly Field; engineering course in airplanes, engines and parachutes, 1920; Langley Field in connection with Project B, 1921.

Flying Rating: Reserve Military Aviator; Airplane Pilot.

Present Occupation: 1st Lieut., Air Service.

Address: Lisbon, N. D.

Percival Bradford Crocker

CROCKER, PERCIVAL BRADFORD, Mechanical Engineer; born, Foxboro, Mass., March 1, 1895; son of Willard Crofts Crocker and Annie W. (Crofts) Crocker; married, Gertrude Bristol, June 16, 1921.

Educated: Foxboro High School; Allen School for boys; B. S. 1921, University of Maine.

Aeronautical Activities: M. I. T. Ground School; and 3rd A. I. C., A. E. F.

Flying Rating: Reserve Military Aviator.

Member: Massachusetts Aero Club.

Present Occupation: Mechanical Engineer.

Address: Foxboro, Mass.

Robert Theodore Cronau

CRONAU, ROBERT THEODORE, 1st Lieut., A.S.; born, Kewanee, Ill., Aug. 1, 1896; son of Theodore Cronau.

Educated: Kewanee High School, Texas A. & M. College, Knox College.

Aeronautical Activities: School of Military Aeronautics, Nov. 1917 to Jan. 1918; Kelly Field, Jan. 1918 to March 1918; Camp Dick, March to April 1918; Taliaferro Field, April to Oct. 1918; Garden City, Oct. to Dec. 1918; Carlstrom Field, Dec. 1918 to July 1919; Souther Field, July to Oct. 1919; Carlstrom Field, Oct. 1919 to April 1921; Langley Field, April 1921 to date.

Flying Rating: Reserve Military Aviator, March 11, 1918; Airplane Pilot 1920.

War Service: Nov. 1917 to Nov. 11, 1918.

Present Occupation: 1st Lieut. A.S., 14 Aero Squadron (Heavy Bombardment).

Address: Langley Field, Hampton, Va.; permanent, 323 West Oak St., Kewanee, Ill.

William Redmond Cross

CROSS, WILLIAM REDMOND, Banker; born, South Orange, N. J., June 8, 1874; son of Richard James Cross and Matilda Cross; married, Julia Newbold, April 19, 1913.

Educated: Groton School; A.B. 1896, Yale University.

Professional: Banker.

Aeronautical Activities: Management Committee, Belmont Park Aeronautical Meet, 1910; Governor, Aero Club of America, 1911-1921.

Flying Rating: Aero Club of America License No. 35.

Present Occupation: Banker.

Address: 31 Pine St.; home, 12 East 80th St., New York City.

Walter C. Crowds

CROWDUS, WALTER C., Aircraft Insurance; born, Chicago, Ill., Feb. 19, 1895; son of Walter A. Crowds and Louise (Wheelless) Crowds.

Educated: Grammar School, Hyde Park High School.

Professional: Salesman, Golf Supplies, 1914-1915; Salesman, Huey Co., Architectural and Engineering Supplies, 1916; Rogers Brown & Co., 1919; Aircraft Insurance 1920 to date.

Aeronautical Activities: Ground School, Univ. of Ill., Oct.-Nov. 1917; Flying Cadet, Love Field, Dec. 1917 to April 1918; 2nd Lieut., Instructor, Love Field, May-June 1918; Asst. Engineer Officer, 6th Aero Squadron, Pearl Harbor, Hawaii, July 1918-Feb. 1919.

Flying Rating: Reserve Military Aviator, May 9, 1918; F.A.I. license No. 1829.

War Service: Aug. 1917 to Feb. 15, 1919.

Books: Various articles on Aircraft Insurance.

Present Occupation: Aircraft Insurance.

Address: 759 1st National Bank Building; home, 1510 East 52 Street, Chicago, Ill.

Benedict Crowell

CROWELL, BENEDICT, Mining Engineer; born, Cleveland, Ohio, Oct. 21, 1869; son of William Crowell and Mary (Benedict) Crowell; married, Julia Cobb, 1904.

Educated: St. Pauls School, Concord, N. H.; Ph.B. 1891, M.A. 1918, Yale University.

Professional: Mining Engineer, engaged in iron ore business in Cleveland, and also as builder and contractor until 1917.

War Service: Sept. 1916, appointed Major Q.M.C. and Nov. 1916, member of Kernan Board of War Department to report on Munitions of War and Arsenals; March 1917, went to Washington as associate of Frank A. Scott of General Munitions Board; June 1917, called to active service in Ordnance Department and in Aug. 1917 was transferred to Engineer Corps, Chief of Office and Purchasing Officer of Panama Canal Office, Washington; appointed Assistant Secretary of War, Nov. 1917; Aug. 1918, appointed Director of Munitions.

Books: "The Iron Ores of Lake Superior", by Crowell & Murray; "How America Went to War", written in collaboration with Capt. Robert F. Wilson.

Member: President, Aero Club of America; President, Army Ordnance Association; Cleveland Athletic Club; University Club (N. Y.); Yale Club; Metropolitan (Wash.); Army and Navy Club (Wash.); Chevy Chase Club (Wash.); American Institute of Mining and Metallurgical Engineers; Canadian Mining Institute; Cleveland Historical Society.

Present Occupation: Chairman of Board, Crowell & Little Construction Co.; President, Rosiclare Lead & Fluor-Spar Mining Co.; Partner in firm of Crowell & Murray, Mining Engineers.

Address: 3751 Prospect Ave.; home, 2187 Overlook Road, Cleveland, Ohio.

George Raymond Cullman

CULLMAN, GEORGE RAYMOND, Engineer; born, Jersey City, N. J., May 8, 1896; son of Jacob H. Cullman and Louise Cullman.

Educated: Jersey City Public and High Schools.

Professional: 1911 to 1916, Southern Pacific Railroad Co., N. Y.; June to Nov. 1916, on Mexican Border with 4th Regiment of Militia; Nov.

1916 to April 1917, Southern Pacific Railroad Co., New York, N. Y.

Aeronautical Activities: Received training with Royal Air Force in Canada, Fort Worth, Tex. and England; commercial flying during 1920.

Flying Rating: Reserve Military Aviator.

War Service: Overseas with 166th Aero Squadron, 1st Day Bombardment Group, 1918; Army of Occupation Nov. 1918 to April 1919.

Member: Aero Club of America.

Present Occupation: With Pacific Gas and Electric Co. in California.

Address: Cassel, Shasta County, Calif.; home, 31 Fulton Ave., Jersey City, N. J.

Clarence C. Culver

CULVER, CLARENCE C., Student Officer, Army War College; born, Milford, Nebr., Dec. 25, 1872; son of Brig. Gen. J. H. Culver and Ada I. (Davison) Culver.

Educated: Public schools, Milford, Nebr.; University of Nebraska; Electrical Engineer, 1920.

Professional: In charge of meteorological station and electrical service system of University of Nebraska while student at that institution; served in 3rd Cavalry, U. S. Volunteers in Spanish American War; 1st Lieut. Squadron Philippine Cavalry, U. S. Volunteers, 1900; 2nd Lieut. Regular Army 1901, serving in United States, West Indies and Philippine Islands; Philippine Insurrection with Major General Lawton and Major General Arthur McArthur; 1904, promoted to 1st Lieut. Regular Army; 1915, Captain; 1920, Major and Lt. Col.; commanded United States Submarine Cable Boat, Cyrus W. Field, 1909 and 1910, on radio and submarine duty; detailed to aviation duty, Aug. 1915; assigned to Air Service, 1920; Temp. Major 1917, Lt. Col., and Colonel 1918.

Aeronautical Activities: In August 1910, conducted experiments with Harry M. Harton of New York in airplane wireless, which resulted in successful transmission from airplane to ground; designed and built receiving apparatus used for these experiments; in personal charge of official altitude measurements in International Aviation Tournament, Belmont Park, Oct. 1910; at this meet proposed feasibility of developing airplane radio telephone and Voice Commanded flying; in charge similar altitude measurements at International Aviation Tournament, Grant Park, Chicago, Aug. 1911; in 1915 and 1916 accomplished long distance radio transmission from airplanes up to 140 miles with 1/5 kilowatt power, devised means



Clarence C. Culver

of insulating the sound of the tractor motor of the airplanes necessary to enable one to receive radio aboard the airplane, and successfully exchanged messages between airplanes in flight; in Oct. 1915 made study of dictaphone record of speech made in flight and reported practicability of telephonic speech in the noise of airplane motors in the air; in June 1916 arranged with E. J. Simon, Radio Engineer of New York, to build airplane radio telephone set embodying results of experiments of 1915 and 1916, and in February, 1917, this set transmitted the human voice from airplane in flight; May 1917 detailed aeronautical radio advisor with engineers developing American war radio apparatus; Secretary S. C. Aviation School, San Diego 1915-1916; August 1917, was sent to Europe to demonstrate American airplane radio equipment, and to investigate requirements American apparatus should meet; May 1918 instituted training in Voice Commanded Flying at Gerstner Field; 1918-1920 in Office of the Director of Military Aeronautics and Chief of Air Service, in general charge of matters pertaining to radio and communications, Air Service Activities.

Flying Rating: Aviation student 1916, Junior Military Aviator 1917, Airplane Pilot 1920.

Honors: Distinguished Service Medal, 1919, for development Aeronautical Radio and Voice Commanded flying; Medal of Merit, (1916) for Aeronautical Radio development, Medal of Merit (1918) for Aero Radio telephone experimentation Certificate of Merit (1919) for Aeronautical Radio activities, Aero Club of America.

Member: American Institute of Radio Engineers; American Meteorological Society; Aero Club of America; Army and Navy Clubs (New York, Washington and Manila); University Club; Manila Racquet Club, (Wash.).

Present Occupation: Student Officer, General Staff College, Washington, D. C.

Address: War College; home, Army and Navy Club, Washington, D. C.

Damon E. Cummings

CUMMINGS, DAMON E., Commander, U. S. Navy; born, St. Cloud, Minn., April 16, 1885; son of Rev. Chas. A. Cummings, and Ada F. Cummings; married, Ennis F. Morris, April 17, 1909.

Education: Local Grammar and High Schools at Chicago and Belvidere, Ill.; 1907, U. S. Naval Academy; Graduate Naval War College, Nov. 1920.

Professional: Appointed to U. S. Naval Academy May 22, 1908, from Illinois.

Aeronautical Activities: Executive officer of U.S.S. Shawmut, first U. S. Naval Aircraft tender, Jan. 1919 to Nov. 1919; Experimental work with development of bombing; Command of Naval air Station, Rockaway Beach, L. I., N. Y. from Nov. 23, 1920 to Nov. 3, 1921.

War Service: Officer U. S. Navy since May 22, 1908.

War Honors: Navy Cross for service as executive officer, U.S.S. Shawmut, laying Northern Mine Barrage in World War, Commander Avis (Portuguese) for services in connection with first Transatlantic flight (NC4) May 1919.

Member: Naval History Society.

Present Occupation: Navigator, U.S.S. Arkansas.

Address: U.S.S. Arkansas, c/o P. M., New York.

Alfred A. Cunningham

CUNNINGHAM, ALFRED A., Major, Marine Corps; born, Atlanta, Ga., March 8, 1882; son of John D. Cunningham and Cornelia (Dobbins) Cunningham.

Education: Gordon College.

Professional: Entered U. S. Marine Corps, Jan. 9, 1909, as 2nd Lieutenant; continued as officer to date.

Aeronautical Activities: First Marine Corps officer ordered to aviation duty; began this duty, Jan. 1912; Senior Marine Corps Aviator since that date and in charge of Marine Corps aviation until Dec. 1920; commanded 1st Marine Aviation Force of 4 squadrons over front in France.

Flying Rating: A. C. of A. Hydroplane Certificate No. 2; Navy Air Pilot No. 5; Naval Aviator No. 5.

War Service: In France Dec. 15, 1917 to April 12, 1918; commanded 1st Marine Aviation Force of 4 squadrons at French front, Aug. 1, 1918 to Dec. 15, 1918.

War Honors: Awarded Navy Cross.

Present Occupation: Commanding 1st Air Squadron, U. S. M. C.

Address: San Domingo City, D. R.; home, 1767 Massachusetts Ave., Washington, D. C.

James Martin Curran

CURRAN, JAMES MARTIN, Commercial Aviator; born, Eau Claire, Wis., Sept. 7, 1891; son of Martin Curran and Susan Curran.

Education: Public schools of Thief, River Falls, Minn.; B.S. 1914, University of Minnesota; M.S. 1916, University of Minnesota.

Professional: Buyer for seed company, 1916-1917; U. S. Air Service, 1917-1919; Ralph C. Diggins School of Aviation, 1919-1921.

Aeronautical Activities: Sept. 1917 to Jan. 1919, U. S. Air Service; flying instructor at Taliaferro Field; instructor at Lake Charles, La.; Chief Instructor, Ralph C. Diggins School, 1919 to date.

Flying Rating: Aero Club No. 4168; breveted in 1919.

War Service: Sept. 1917 to Jan. 1919.

Frank Curry, M. D. and Mary (MacKinnin) Curry; married, Eleanor Dorothy Montgomery, Jan. 4, 1921.

Education: Public schools of New York City, 1 year; St. Jerome's Academy, 5 years; C. C. N. Y. Class of 1906; 1908, U. S. Military Academy.

Aeronautical Activities: Detailed Aviation Section Signal Corps, Aug. 1915; Pilot, 1st Aero Squadron, Pershing Expedition into Mexico, May 1916 to Jan. 1917; commanding 6th Aero Squadron, Pearl Harbor, H. T., Feb. to July 1917; Office, Chief Signal Officer, Washington, D. C., Sept. to Nov. 1917; Commanding Officer, Ellington Field, Tex., Nov. 1917 to April 1918; Chief of Staff, Air Service, 2nd Army, A. E. F., Oct. 1918 to April 1919; Officially credited with destruction of one German observation balloon; Department Air Officer, Hawaiian Department, Jan. 1920 to date.

Flying Rating: Expert Aviator, Aero Club of America, 1916; Junior Military Aviator; Military Aviator; Airplane Pilot.

War Service: In regular Army during entire war; in U. S. commanding flying schools, and in office, Chief of Air Service; in A. E. F. at flying schools and Chief of Staff, Air Service, 2nd Army.

Member: Army and Navy Club (Wash.); Catholic Club (N. Y.).

Present Occupation: Department Air Officer, Hawaiian Department.

Address: Headquarters Hawaiian Department, Honolulu, H. T.

James Thomas Curry, Jr.

CURRY, JAMES THOMAS, Jr., 1st Lieut., Air Service; born, McMinnville, Tenn., Jan. 7, 1892; son of James Thomas Curry and Mary E. (Moffat) Curry.

Education: Webb School, Bell Buckle, Tenn.; one year, Southwestern University, Georgetown, Tex.

Professional: 1912-1917, General ranching in California.

Aeronautical Activities: Sept. 22, to Nov. 19, 1917, Ground School, Austin, Tex.; Jan. 1, to March 2, 1918; flying cadet at Kelly Field; April 4, 1918 to Oct. 4, 1918, flying instructor, Barron Field; Oct. 4 to June 20, 1919, advanced training at Ellington Field.

Flying Rating: Reserve Military Aviator, March 2, 1918.

War Service: U. S. Air Service from Sept. 22, 1917 to date.

Present Occupation: 1st Lieut., Air Service.

Address: 876 Waco Ave., San Antonio, Tex.

Edward Peck Curtis

CURTIS, EDWARD PECK, Manufacturer; born, Rochester, N. Y., Jan. 14, 1897; son of Gurney Curtis and Alice Farley (Peck) Curtis.

Education: St. Georges School, Newport, R. I.; Williams College.

Professional: Went to Baltic Provinces with U. S. Commission, June 1919 for a year; since that has been connected with the Eastman Kodak Co.

Aeronautical Activities: Trained in France; flew in 95th Squadron from Jan. 1918 to Armistice;

American Ace, officially credited with destruction of six enemy planes.

Flying Rating: Junior Military Aviator.

War Service: French ambulance, Jan. 1917 to Aug. 1917; U. S. Air Service, Sept. 1917 to June 1919.

War Honors: French Croix de Guerre 2 citations; American Distinguished Service Cross; Russian Order of St. Anne; 2 citations; "For extraordinary services in action, ———, France."

"Lieut. Curtis volunteered to perform a reconnaissance patrol of particular danger and importance within the enemy territory. He made the entire journey through heavy anti-aircraft and machine gun fire and flew at an extremely low altitude to secure the desired information." "For exceptional gallantry at Woel, Belgium on Sept. 14, 1918 in the operation of the A. E. F."

Member: Aero Club of America; Country Club of Rochester.

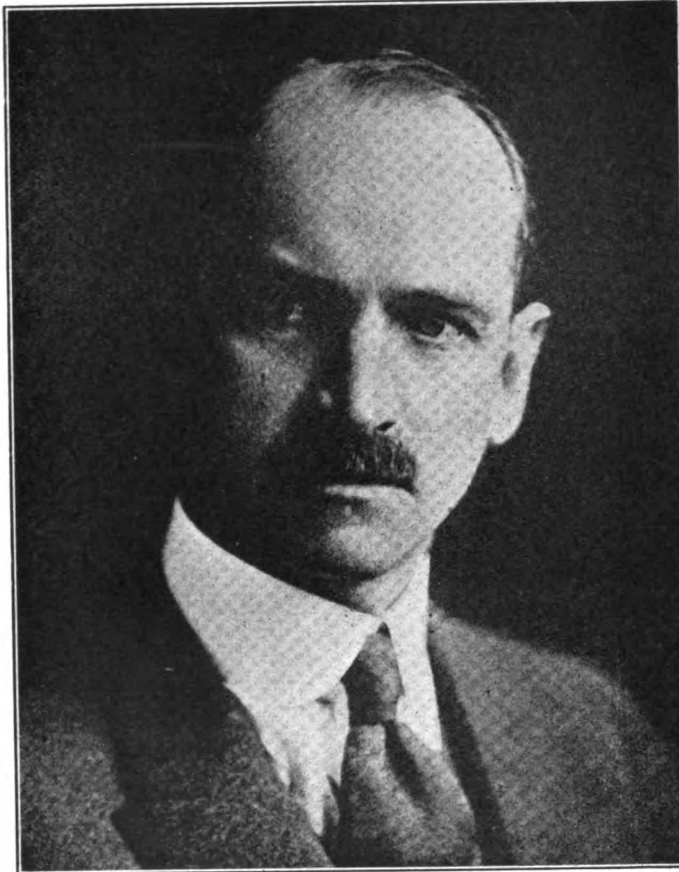
Present Occupation: Eastman Kodak Co.

Address: 843 State St.; home, 8 N. Goodman St., Rochester, N. Y.

Glenn Hammond Curtiss

CURTISS, GLENN HAMMOND, Airplane Constructor; born, Hammondsport, N. Y., May 21, 1878; son of Frank R. Curtiss and Lusa (Andrews) Curtiss; married, Lena P. Neff 1898.

Education: Public schools of Hammondsport, N. Y.



Glenn H. Curtiss

Member: Aero Club of America; Aero Club of Illinois.

Present Occupation: Secretary and Chief Instructor of Ralph C. Diggins Co.

Address: 140 N. Dearborn St., Chicago, Ill.

Stanley Thompson Curran

CURRAN, STANLEY THOMPSON, Telephone Engineer; born, New York City, April 21, 1894; son of Charles C. Curran and Grace W. Curran; married, Helen L. Guyette, June 5, 1920.

Education: E. C. Grammar and high schools; Cornell University.

Professional: Army Ordnance Department as Mechanical Engineer; Western Electric Co., Engineering Department, Jan. 1920 to date.

Aeronautical Activities: U. S. Naval Aviation, Sept. 1917 to March 1919; stationed at Pensacola, Fla., Hampton Roads, Va., Fort Worth, Tex., and Killingholme, England.

Flying Rating: Naval Aviator No. 287, Jan. 1918.

War Service: Navy, April 1917 to March 1919.

Present Occupation: Telephone Engineer, Western Electric Co.

Address: 463 West St.; home, 39 West 67th St., New York, N. Y.

John Francis Curry

CURRY, JOHN FRANCIS, Major, Air Service; born, New York City, April 22, 1886; son of J.

Professional: Early pioneer work motorcycles and internal combustion engines; champion motorcycle racer; established world's record for single cylinder motorcycles, 1906; established world's record for mile in 26-2/5 seconds equalling 137 miles an hour, record still stands; 1905, G. H. Curtiss Manufacturing Co., builders of Curtiss motorcycles; 1907 to date, building airplanes, hydroplanes and flying boats and aeronautical engines.

Aeronautical Activities: 1905, Built engine for U. S. Dirigible No. 1 and assisted Capt. Thomas Baldwin in trial tests; 1907, with Dr. Alexander Graham Bell, assisted in work of Aerial Experiment Association as motor expert and director of experiments; the G. H. Curtiss Manufacturing Co. built the Red Wing, White Wing, June Bug and Silver Dart, with motors designed by Curtiss; July 4, 1908, won Scientific American Trophy in June Bug; 1909, built airplane for Aeronautical Society, the first order placed in U. S. by civilian body; 1909, won Gordon-Bennett Speed Trophy at Rheims, France; instructed in flying many of the earliest government and exhibition flyers; 1910, won N. Y. World prize of \$10,000 for flight from Albany to New York; 1911 and 1912, awarded Aero Club of America Trophy; 1911, Feb. 23, accomplished first flight from land to water and water to land on amphibious airplane; 1911, awarded Robert J. Collier Trophy for most signal advance in aviation during year; 1913, presented with Langley Medal by Smithsonian Institution; 1916, organized Curtiss Aeroplane and Motor Corporation; also Curtiss Engineering Corp., Garden City; during war built large quantities (140 different models to date) of airplanes, seaplanes and engines for U. S. and allied governments; assisted U. S. Navy in the design and construction of N C boats.

Flying Rating: License No. 1, Aero Club of America; License No. 2, Aero Club of France.

Member: Aero Club of America and numerous social and professional organizations.

Present Occupation: Head of Engineering Organization of Curtiss Corporations.

Address: Garden City, Long Island, N. Y.; winter, "Hialeah", Miami, Fla.

Robert Edward Dake

DAKE, ROBERT EDWARD, Airplane pilot; born, Chicago, Ill., Jan. 25, 1895; son of Edward J. Dake and Claribel (Van Riper) Dake.

Educated: Public and high schools of Waukegan, Ill.; B. A. 1921, Carnegie Institute of Technology.

Aeronautical Activities: Chief Pilot, Kenney Aircraft Corp., Pittsburgh, Pa., May 6 to Nov. 1, 1920; Chief Pilot, Mayer Aircraft Corp., Bridgeville, Pa. at present time.

Flying Rating: Reserve Military Aviator.
War Service: Lieut., U. S. Air Service, Oct. 4, 1917 to Feb. 4, 1919; Instructor and Stage Commander.

Member: Pittsburgh Aero Club.
Present Occupation: Chief Pilot, Mayer Aircraft Corp., Bridgeville, Pa.

Address: 4921 Forbes St., Pittsburgh, Pa.

Elliot Daland

DALAND, ELLIOT, Aeronautical Engineer; born, Brookline, Mass., Jan. 3, 1886; son of Tucker Daland and Emily J. (Elliot) Daland; married, Katherine M. Browne, Sept. 1910.

Educated: Private Schools; Volkman's, Boston; Cloyne, Newport; Hackley, Tarrytown; A. B. 1909, Harvard; Graduate School of Applied Science 1910; Aeronautical Engineer, Mass. Inst. of Tech. 1918.

Professional: With Sullivan Machinery Co., Claremont, N. H., 1910-1911; American Gas Tool Co., Chicago, Ill., 1911-1916; Engineer on experimental gas press.

Aeronautical Activities: Standard Aero Corp., 1918-1919; Curtiss Engineering Corp., 1920; Huff, Daland & Co., 1920-1921.

Present Occupation: Vice-Pres. and Chief Engineer Huff, Daland & Co., airplane constructors.
Address: Huff, Daland & Co.; home, 618 Greene St., Ogdensburg, N. Y.

Herbert Arthur Dargue

DARGUE, HERBERT ARTHUR, Major, Air Service; born, Brooklyn, N. Y., Nov. 17, 1886; son of Arthur P. Dargue and Madeline (Newins) Dargue; married, Marie Salmon, Nov. 17, 1915.

Educated: No. 3, Brooklyn Public School; Boys High School, Brooklyn, N. Y.; Boonton High School, Boonton, N. J.; U. S. Military Academy.

Professional: Army officer since June 13, 1911.
Aeronautical Activities: Began flying March 8, 1913; Expedition into Mexico, March 15, 1916 to May 4, 1916; Chief of Training at San Diego, Calif., July 1916; Commandant Observation School, Fort Sill, Okla., March 1918; Special Mission overseas, Aug. 1918; Depot. A. S. Officer S. E. Dept., July 1919; Course in Aeronautical Engineering, Jan. 1920; Office Chief of Air Service, Sept. 1920.

Flying Rating: Military Aviator, July 1913.
War Service: Special Mission Overseas, Aug. Sept., and Oct. 1918.

Member: Air Service Association.
Present Occupation: Advisory Board, Office of Chief of Air Service.
Address: Air Service, Washington, D. C.; home, Allendale, N. J.

Howard C. Davidson

DAVIDSON, HOWARD C., Major, Air Service; born, Wharton, Texas, Sept. 15, 1890; son of John C. Davidson and Lily (Carleton) Davidson.

Educated: Wharton High School; Texas Agricultural and Mechanical College; Graduate U. S. Military Academy, 1913.

Aeronautical Activities: Flying training, San Diego, Calif., Jan. to Sept. 1916; 1st Aero Squadron, Mexican Punitive Expedition, Columbus, New Mexico, Sept. 1916 to March 1917; San Antonio 3rd Aero Squadron March to May 1917; Cornell Ground School, May to Oct. 1917.

Flying Rating: Junior Military Aviator, Sept. 16, 1916; Military Aviator, Sept. 16, 1919; Airplane Pilot, Oct. 5, 1920.

War Service: Training Section, A. E. F., Paris, Tours and 2nd A. I. C., Oct. 1917 to Sept. 1918; Corps Air Service Officer, 7 Corps, Sept. 1918 to April 1919; student, University of Paris, April 1919 to July 1919; returned from overseas, Aug. 1919.

Present Occupation: Supply Officer, McCook Field, Dayton, Ohio.

Address: McCook Field, Dayton, Ohio; home, R. F. D. No. 3, Bryan, Tex.



Milton F. Davis

Rufus Benjamin Davidson

DAVIDSON, RUFUS BENJAMIN, 1st Lieut., Air Service; born, Shady Dale, Ga., Oct. 19, 1893; son of Benjamin M. Davidson and Lillian E. Davidson.

Educated: Shady Dale High School; University of Georgia.

Professional: 1912-1915, Teacher; 1916-1917, telephone construction clerk.

Aeronautical Activities: Training at various fields; attached to 20th Squadron since 1919.

Flying Rating: Reserve Military Aviator, Sept. 11, 1918; Airplane Pilot.

War Service: Army Air Service, March 9, 1918 to present date.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Franklin Case Davies

DAVIES, FRANKLIN CASE, Student; born, Racine, Wis., Sept. 26, 1899; son of John P. Davies and Lillie E. Davies.

Educated: Racine grade and high schools; University of Wisconsin.

Aeronautical Activities: Instructor at Junior Plattsburg Camp, summer of 1919; passenger carrying at Lake Placid, N. Y. and Plattsburg, N. Y., until middle of Sept. 1919; testing for Curtiss N. Y. Aircraft Corp. and passenger carrying through N. Y. and N. J., summer of 1920.

Flying Rating: Reserve Military Aviator, June 1919 (No. 2044).

War Service: Army, Nov. 1918 to June 1919.

Present Occupation: Student.
Address: 16 Mendota Court, Madison, Wis.; home, 744 College Ave., Racine, Wis.

Isaiah Davies

DAVIES, ISAAH, 1st Lieut., Air Service; born, Baxter Springs, Kans., July 12, 1890; son of William B. Davies and Mollie Davies; married, Beatrice M. Whitaker, June 2, 1915.

Educated: Grammar school and high school of Cherokee Co., Kans.; Business College, 1911.

Professional: Professor in business college, 1911-1912; U. S. Army since 1912.

Aeronautical Activities: Aviation Section, Signal Corps, 1914 to Dec. 1917; 1st Lieut. and Capt., Air Service, Dec. 1917 to July 1920; 1st Lieut., Air Service, Regular Army, July 1920 to date.

Flying Rating: Reserve Military Aviator; Airplane Pilot.

War Service: Air Service, April 6, 1917 to Nov. 11, 1918.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Michael F. Davis

DAVIS, MICHAEL F., Major, Air Service; born, New Richmond, Ohio, March 25, 1894; son of Robert A. Davis and Frances M. Davis.

Educated: Public Schools, New Richmond, Ohio; 1915, U. S. Military Academy, West Point.

Aeronautical Activities: Aviation Section, Signal Corps, Sept. 1916; Continuous service to date; Balloon student at present.

Flying Rating: Airplane Pilot.

Member: Army and Navy Club (Wash.).

Present Occupation: Balloon Student, Ross Field, Calif.

Address: Chief of Air Service, Washington, D. C.; home, Ross Field, Arcadia, Calif.

Milton F. Davis

DAVIS, MILTON F., Colonel, U. S. Army, retired Brig. Gen. O.R.C.; born, Minnesota, Nov. 15, 1864; son of Evan R. Davis and Julia A. (Ryder) Davis.

Educated: Public schools, Oregon; U. S. Military Academy, West Point.

Professional: 2nd Lieut. 1st Lieut. Captain of Cavalry, Major, Judge Advocate General's Department. Engineer Officer, Sierra Forest Reserve; explored Grand Canon 1895; Adjutant General, 3d Brigade, P. I. Insurrection; Sec'y., Staff College; Gen. Staff. Aide to Chief of Staff; Colonel, Signal Corps.

Aeronautical Activities: Chief of Training, Air Service 1918; Chief of Staff, Air Service (Executive) 1919.

Flying Training: Finished "Dual Instruction."

Member: The Lambs, The Explorers, Camp Fire of America, Army and Navy (N. Y.), Army and Navy Club (Wash.).

Present Occupation: Commandant of Cadets, New York Military Academy.

Address: Cornwall on Hudson, N. Y.

Raymond E. Davis

DAVIS, RAYMOND E., 1st Lieut., Air Service; born, Danville, Ill., Aug. 10, 1894; son of Louis S. Davis and Eva A. Davis.

Educated: Public schools; one year, academic college; three years, Ceramic Engineering.

Aeronautical Activities: Army Air Service from July 21, 1917 to date.

Flying Rating: Airplane Pilot, Nov. 24, 1917.

War Service: U. S. Army, May 12, 1917 to date.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Hampton, Va.; home, 105 E. English St., Danville, Ill.

Reed Ellsworth Davis

DAVIS, REED ELLSWORTH, Commercial Aviator; born, Humboldt, Neb., Aug. 29, 1893; son of A. J. Davis and E. J. (Hurley) Davis.

Educated: Public schools; Chillicothe Normal, Chillicothe, Mo.; Grand Island College, Grand Island, Nebr.

Professional: Teacher, commercial work and business administration, 1916-1918.

Aeronautical Activities: Signal Corps, Div. of Aeronautics; Ground School work at University of California; training at Mather Field; part owner Victory Flyers, 1919; Sales Manager North Platte Aircraft Co., 1920; with G. M. Bellanca to date.

Member: Aero Club of Omaha; Neb. State Air Assn.

Flying Rating: Reserve Military Aviator.

War Service: Jan. 1918 to Jan. 1919.

Present Occupation: With G. M. Bellanca.

Address: Box 889, Omaha, Neb.; home, North Loup, Nebr.

Warren Jefferson Davis

DAVIS, WARREN JEFFERSON, Lawyer; born, Virginia, March 17, 1885.

Educated: B.S., George Washington University; LL.B., Georgetown University; post graduate work, University of Virginia.

Professional: Lawyer.

War Service: Liaison Officer stationed in office of Director of Military Aeronautics, October, 1918



W. Jefferson Davis

to January, 1919; Squadron Commander 479th Pursuit Squadron.

Books: "Laws of the Air", "Air Laws and Air Lanes;"

Member: Army and Navy Club, Washington; Aero Club of America; Aero Club of San Diego; Member Legal Advisory Committee of the American Bar Association; Member Law Committee of the Aero Club of America.

Present Occupation: Lawyer.

Address: 1009 J Avenue, Coronado, Calif.

Frederick Trubee Davison

DAVISON, FREDERICK TRUBEE, Law Student born, New York, N. Y., Feb. 7, 1896; son of H. P. Davison and Kate T. Davison; married, Dorothy Peabody, April 16, 1920.

Educated: Groton School, Groton, Mass.; B. A. Honoris Causa, Yale, class 1918; Columbia Law School, class of 1922.

Aeronautical Activities: Learned to fly 1916; flew till July 28, 1917.

War Service: Joined Naval Flying Corps, March 24, 1917; Sick leave from July 28, 1917 to Dec. 24, 1918.

Member: Aero Club of America; University Club; Yale Club; National Republican Club.

Present Occupation: Law Student.

Address: Locust Valley, L. I., N. Y.

Earl S. Daugherty

DAUGHERTY, EARL S., Commercial Aviation; born, Des Moines, Iowa, April 4, 1887; son of Charles J. Daugherty and Mary A. (Jones) Daugherty.

Educated: Public schools of Long Beach, Calif.

Professional: Banking, 1905-1907; photographer, 1908-1910; automobile factory, 1910-1911.

Aeronautical Activities: Learned to fly at Dominguez Field, June 1911; exhibition flying and testing machines, 1912; testing, experimental and exhibition work for the Illinois Aero Construction Co., 1912; exhibition flying from 1913 to 1915; passenger carrying, 1916-1917; flying instructor, Signal Corps Aviation School, San Diego, Calif., 1917-1918; flying instructor, U. S. Air Service, March Field, 1918-1919; opened the Daugherty School of Aviation and Flying Field at Long Beach, Calif., June 1919; exhibition work, instruction and passenger carrying to date.

Flying Rating: Aero Club of America License No. 87; Reserve Military Aviator, Sept. 1918.

War Service: July 1917 to March 1919.

Present Occupation: Operating the Daugherty School of Aviation and Flying Field.

Address: Willow St. and American Ave.; home, 431 E. Seaside Blvd., Long Beach, Calif.

Charles Healy Day

DAY, CHARLES HEALY, Aeronautical Engineer; born, Salamanca, N. Y., Dec. 29, 1884; son of Charles Oliver Day and Lucy S. (Healy) Day; married, Gladys Darlington MacCleary, Sept. 1, 1917.

Educated: Grade schools of Salamanca, N. Y. and Hornell, N. Y.; high school of Hornell, N. Y.; 1906, Rensselaer Polytechnic Institute, Troy, N. Y.

Professional: 1904, draughting and design on Climax gas engines with M. H. C. Brombacher, Buffalo, N. Y.; 1905, California for health and mining in Southeast Alaska; 1906, Instructor, Y. M. C. A. auto school, Los Angeles, Calif. and member of firm of Brown and Day, Auto Repair Shop, Los Angeles, Calif.; 1907, running auto stage line from Rhyolite, Nev. to points in Death Valley and the Nevada desert; 1908, Supt. and designing engineer with Klink Motor Car Co., Dansville, N. Y.; 1909, motorcycle sales and repairs at Long Beach, Calif.

Aeronautical Activities: 1909-1910, designed, built and flew tractor biplane powered with motor of own design and manufacture. A conventional biplane structure of 25 ft. spread, 5 ft. chord, trailing ailerons, two wheel landing gear. Motor, a five cyl. semi-radial, fixed cyl. air cooled with tractor screw geared to crank shaft at half speed; 1911, with Glenn L. Martin, designing and building pusher type biplanes at Santa Ana, Calif.; 1912, own airplane factory in Los Angeles, Calif. designing and building Day Tractor Biplanes and other types on order; the Day Tractor, a conventional two place tractor biplane type powered by Hall-Scott 30 hp. motor with tractor screw chain driven at half speed, and advertised and sold, complete at \$2500.00; 1913, factory sold and joined Glenn L. Martin Co. as Chief Engineer designing and building tractor type biplanes; 1914, designed and built special looping machine (second in this country to loop) and with DeLloyd Thompson as pilot filled exhibitions throughout the U. S.; 1914, joined Sloane Airplane Co. at Astoria, Long Island, as Chief Engineer; this firm moved to Bound Brook, N. J. and afterward became the Standard Aero Corp. of Plainfield, N. J.; remained as Chief Engineer; the Standard Aircraft Corp. was organized and a plant purchased in Elizabeth, N. J., continued with this firm, as a Vice President, Director and Engineer until the plant closed in 1919, having supervision over all matters pertaining to design and engineering.

Member: Aero Club of America; Flying Club; Society of Automotive Engineers.

Present Occupation: President, Minday Products Corp.

Address: 332 Leland Ave.; home, 720 Berkeley Ave., Plainfield, N. J.

Robin A. Day

DAY, ROBIN A., 1st Lieut., Air Service; born, Dec. 5, 1890; son of Geo. T. Day and Williamette Day; married, Harriette M. Falconer, Dec. 2, 1917.



Charles H. Day



Edward A. Deeds

Educated: Bismarck High School; Highland Park College.

Professional: Salesman.

Flying Rating: Airplane Pilot, March 1919.

War Service: Air Service and Infantry since Aug. 1917.

Present Occupation: 1st Lieut., Air Service.

Address: 202 Avenue E, Bismarck, N. D.

Harry Perry De Coster

DE COSTER, HARRY PERRY, Commercial Aviation; born, San Antonio, Tex., Dec. 10, 1895; son of Harry W. De Coster and Ida (Perry) De Coster; married, Selma Johanson, Aug. 30, 1919.

Educated: Abbott School, Farmington, Me.; Hebron Academy; University of Maine.

Professional: With Fiske Rubber Co., Chicopee Falls, Mass.

Aeronautical Activities: Training at Love Field; student of Gosport System and assigned to the field as instructor of instructors, Brooks Field; installed Gosport Organization and Training at Rich Field; civilian flying pilot for the Eastern Aircraft Corp.

Flying Rating: Reserve Military Aviator; Gosport Instructor.

War Service: April 1917 to Jan. 1919.

Present Occupation: Operations Manager, The Eastern Aircraft Corp.

Address: 340 First Street, So., Boston, Mass.; home, 74 Glenville Ave., Allston, Mass.

Edward Andrew Deeds

DEEDS, EDWARD ANDREW, born, Granville, Licking County, Ohio, March 12, 1874; son of Charles Deeds and Susan C. (Green) Deeds; married, Edith Walton, March, 1900.

Educated: County District School, Granville; Granville Academy; Denison University; Cornell University.

Professional: Draftsman, The Thresher Electric Co.; Construction and Maintenance Engineer, The National Cash Register Co., later Vice Pres. and Gen. Mgr.; President, The Domestic Engineering Co.; President, The Smith Gas Engineering Co.; Chairman, Miami Conservancy Board; Pres. The Dayton Engineering Laboratories Co.

Aeronautical Activities: Civilian member, Munitions Standards Board in 1917; member, Aircraft Production Board; later in charge of Production Division of Aircraft Board.

War Service: Commissioned Colonel in regular army 1917; in charge of Production Division of Aircraft Production Board, March 1920 to Feb. 1921.

Member: Society of Automotive Engineers; Cleveland Aviation Club; Dayton Engineers' Club; Engineers' Club of New York; American Institute of Engineers; American Electro-Mechanical Society; American Institute of Electrical Engineers; Army and Navy Club; American Legion; Amer. Soc. of Technical Engineers.

Present Occupation: President, The Smith Gas Engineering Co.

Address: 807 Mutual Home Bldg.; home, Moraine Farm, Dayton, Ohio.

Claude M. DeVitalis

DEVITALIS, CLAUDE M., Test Pilot; born, Milan, Italy, Aug. 25, 1891; son of Attilio DeVitalis and Adele DeVitalis; married, Mildred Romme, Dec. 18, 1919.

Educated: Morristown School for Boys; Savage Institute.

Professional: Instructor Medical gymnastics from 1915 to 1917.

Aeronautical Activities: Training S.M.A., Toronto, Canada, 1917; advanced training, Chats Hill, England, 1918, also aerial gunnery training in Scotland.

Flying Rating: R.F.C. Flying Officer.

War Service: July 1917 to Oct. 1918.

Member: Aero Club of Canada.

Present Occupation: Test Pilot.

Address: Huff-Daland Co., Ogdensburg, N. Y.; home, 51 Riverside Drive, New York, N. Y.

Ernest Wykeham Dichman

DICHMAN, ERNEST WYKEHAM, 1st Lieut., Air Service; born, New York City, Jan. 18, 1892; son of Ernest Dichman and Bessie (Grattan) Dichman.

Educated: Public schools of New York City and St. Helena, Calif.; B.S. in Electrical and Mechanical Engineering 1914, University of California.

Professional: Pacific Gas and Electric Co., San Francisco, 1914; Radio Laboratory, Mare Island Navy Yard, 1914-1915; General Electric Co., 1915-1916.

Aeronautical Activities: Flying Cadet, 1917; Ground School, Toronto, Canada; training at Taliaferro Field, 1917-1918; overseas, 1918-1919; Jan. 1919 to date, Engineering Division, Air Service, McCook Field.

Flying Rating: Airplane Pilot, Feb. 25, 1918.

War Service: Army Air Service, 1917 to date.

Member: Army and Navy Club (N. Y.); Dayton City Club, Dayton, Ohio.

Present Occupation: 1st Lieut., Corps of Engineers, Engineering Division, Air Service; Chief, Structures and Aerodynamics Branch; Asst. Chief, Airplane Section.

Address: McCook Field; home, 416 West Second St., Dayton, Ohio.

Grattan Colley Dichman

DICHMAN, GRATTAN COLLEY, Lt. Comdr., U. S. Navy; born, New York City, Dec. 12, 1885; son of Ernest Dichman and Bessie (Grattan) Dichman; married, Louise Braxton Robinson, Oct. 11, 1916.

Educated: U. S. Naval Academy, July 1903 to June 1907.

Professional: Naval Officer.

Aeronautical Activities: Student, Oct. 1915 to May 1916; Naval Aviator, May 1916.

Flying Rating: Naval Aviator Certificate No. 80; French Military Brevet No. 7537; French Naval Brevet No. 347; Aero Club Expert No. 182.

War Service: May 1917 to end of war.

Member: Army and Navy Club (Wash. and Manila, P. I.).

Present Occupation: Lt. Comdr., U.S.N.

Address: Naval Air Station, Hampton Roads, Va.

George Ronald Dickens

DICKENS, GEORGE RONALD, Railway Business; born, London, England, April 30, 1892; son of George Dickens and Evelyn Maud Dickens; married, Louise Jacqueline Garrow, Sept. 9, 1919.

Educated: Central High School; University of Illinois; School of Military Aeronautics.

Aeronautical Activities: Cadet, Feb. to July 1918; 2nd Lieut., Air Service, July 1918 to Aug. 1919; flying training at Camp Dick, Scott Field, Carlstrom Field, Payne Field, Wilbur Wright Field and Dorr Field.

Flying Rating: Reserve Military Aviator; Pursuit Pilot.

Member: Aero Club of America; Aviators' Club of Pennsylvania.

Present Occupation: Transportation Department, Pennsylvania Railroad.

Address: 1923 Harrison St., Philadelphia, Pa.

Hubert Cutler Dickinson

DICKINSON, HUBERT CUTLER, Physicist; born, Bangor, Me., Oct. 11, 1875; son of G. Lyman Dickinson and Emma T. (Cutler) Dickinson; married, Elizabeth Wells, July 9, 1903.

Educated: Public schools of Alma, Nebr.; Williston Seminary, Easthampton, Mass.; B.A. 1900, M.A. 1901, Williams College; Ph.D. 1910, Clark University.

Professional: U. S. Bureau of Standards, 1903-1921; Graduate Laboratory Assistant, Assistant Physicist, Associate Physicist, Physicist, 1918-1921; Manager, Research Department, S. A. E., 1921 to date. (Nov. 1921).

Aeronautical Activities: Scientific Research, power plants at high altitudes, fuels; lubricants, and accessories.

War Service: Civilian status, in charge War Department Research.

Present Occupation: Manager, Research Department, S.A.E.

Address: 29 West 39th Street, New York City; home, 9 Ash St., Flushing, L. I., N. Y.

Ralph C. Diggins

DIGGINS, RALPH C., Commercial Aviator; born, Cadillac, Mich., March 7, 1887; son of Albert B. Diggins and Emma J. Diggins; married, Alma Eske, Jan. 1, 1913.

Educated: Harvard High School; 1904-1905, University of Illinois; 1905-1908, University of Michigan; B. S. Marine Eng.

Professional: Prof. Mathematics and Science, 1909-1913; Athletic Director, 1909-1918; Flying, 1912-1913; Associated Theatres Co., 1913-1917; Army Air Service, 1917-1918; Commercial Flying, 1919-1921.

Aeronautical Activities: Flying, 1912-1913 exhibitions, Curtiss Pusher, Queen Monoplane; 1917-1918, U. S. Army Air Service, A. E. F., 92nd Squadron Night Bombing; 1919-1921, School of Flight and Commercial Flying, Chicago, Ill.

Flying Rating: Certificate No. 1719, June 19, 1918, International Federation of Aeronautics.

War Service: 2nd Lieut. Army Air Service, July 3, 1917 to Jan. 3, 1919.

Member: Aero Club of America, Illinois; Aeronautical Chamber of Commerce.

Present Occupation: Commercial Aviation; President, Ralph C. Diggins Co.

Address: 140 N. Dearborn St.; home, 4930 Sheridan Road, Chicago, Ill.

Victor H. Dill

DILL, VICTOR H., Aeronautical Mechanical Engineer; born, Anna, Ohio, Aug. 30, 1881; son of Russell B. Dill and Emily P. Dill; married, Alice Mary VanRiper, Sept. 6, 1904.

Educated: High School of Sidney, Ohio; B. S. 1903; C. E. 1913, Case School of Applied Science, Cleveland, Ohio.

Professional: 1903-1912, Designing and Estimating Engineer, Central States Bridge Co.; 1912-1914, Chief Engineer, Pan American Bridge Co.; 1914-1917, Contracting Engineer, Indiana Bridge Co.

Aeronautical Activities: 1917-1922 (May 24, 1917 to date) Aeronautical Mechanical Engineer in War Department, Air Service; Project Engineer on special technical balloon and airship equipment used by the U. S. Army Air Service in the housing mooring and docking of airships, such as hangars, mooring masts and docking rails.

War Service: In civilian status with U. S. Army Air Service, May 1917 to date.

Present Occupation: Project Engineer on hangars, mooring and landing gear for airships.

Address: Air Service Engineering Division, McCook Field; home, 128 W. Fairview Ave., Dayton, Ohio.

Charles Rudolph D'Olive

D'OLIVE, CHARLES RUDOLPH, Insurance; born, Suggsville, Ala., July 10, 1896; son of Rudolph D'Olive and Leila (Whisenhunt) D'Olive.

Educated: High Schools of Hattiesburg, Miss.; B.S. in E.E. 1916, Mississippi Agricultural and Mechanical College.

Professional: Southern Bell Telephone Co., 1916; Assistant Engineer, Underwriters' Laboratories, 1919-1921; Superintendent, Label Service, Underwriters' Laboratories, Sept. 1921 to date.

Aeronautical Activities: Army, April 6, 1917 to Oct. 30, 1917; Cadet, Memphis, Tenn., 4th School Squadron; commissioned 1st Lieutenant, A.S.S.O.R.C., Oct. 30, 1917; July 1917 to Nov. 1917 stationed at Chanute Field.

Flying Rating: Reserve Military Aviator.

War Service: 3rd A.I.C., Issoudun, France, Dec. 15, 1917 to Aug. 20, 1918; joined 93rd Pursuit Squadron, Aug. 25, 1918; flew offensives of St. Mihiel and Meuse-Argonne; made Flight Commander, 141st Squadron, 4th Group, Nov. 1, 1918; discharged Feb. 4, 1919.

War Honors: Distinguished Service Cross; citation; officially credited with the destruction of four enemy planes.

Member: Aero Club of America.

Present Occupation: Superintendent, Label Service' Underwriters' Laboratories.

Address: 207 East Ohio St.; home, 7233, N. Hilldale Ave., Chicago, Ill.

Flavius Afton Donaldson

DONALDSON, FLAVIUS AFTON, Civilian Aviator; born, Milford, Iowa, Jan. 9, 1897; son of R. E. Donaldson and Flora B. Donaldson.

Educated: Milford High School; University of Iowa.

Aeronautical Activities: Enlisted at Kelly Field, Dec. 1917; S.M.A., Austin, Tex., March to June; Camp Dick, June 1918; Carruthers Field, July to Nov. 1918; Brooks Field, Nov. 1918 to Jan. 1919; civilian flying from Jan. 1919 to date; won the 90 mile race at Omaha, Nov. 2, 1921; for planes with a speed of 75 m.p.h. or under. Also won the Junior Larsen Trophy on Nov. 8, 1921.

Flying Rating: Reserve Military Aviator, Oct. 1918.

War Service: Dec. 1917 to Jan. 1919.

Present Occupation: Civilian aviator.

Address: Milford, Iowa.

Harry Grant Donaldson

DONALDSON, HARRY GRANT, Civilian Aviator; born, Milford, Iowa, Oct. 18, 1890; son of R. E. Donaldson and Flora B. Donaldson.

Educated: Milford High School.

Professional: Automobile business, 1910-1917; 1915, automobile racing at Indianapolis, Sioux City and Omaha.

Aeronautical Activities: Training at Kelly Field, Dec. 1917 to March 1918; S.M.A., Austin, Tex., March to June 1918; Camp Dick, Carruthers Field and Love Field until discharged in Dec. 1918; civilian flying ever since discharged.

Flying Rating: Reserve Military Aviator.

War Service: Dec. 1917 to Dec. 1918.

Present Occupation: Civilian flying.

Address: Milford, Iowa.

John Owen Donaldson

DONALDSON, JOHN OWEN, American Ace; born, Fort Yates, N. D., May 14, 1897; son of Col. Thomas A. Donaldson and Elizabeth (Wilson) Donaldson.

Educated: Central High School; traveled so much in early youth never attended public schools more than a year and half at a time; Furman University, S. C.; Cornell University, N. Y.

Aeronautical Activities: Ground school, Aug. and Sept. 1917; elementary and higher flying, Armour Heights, Toronto, Canada; school of aerial gunnery, instructor in flying, Ft. Worth, Tex.; school of aerial fighting in England; active service on the front beginning June 1918; transcontinental air race to San Francisco and return to New York, awarded second place; American Ace, officially credited with destruction of 8 enemy airplanes.

Flying Rating: Reserve Military Aviator, March 14, 1918; Military Aviator, Aug. 10, 1918.

War Service: July 6, 1917 to June 1920; on front from June to Sept.; taken prisoner Sept. and escaped into Holland, Oct. 23, 1918; promoted to 1st Lieut., Aug. 10, 1918; to Captain, July 1919.

War Honors: Distinguished Flying Cross; six citations for gallantry in action.

Member: Rotary Club; Aero Club of America.

Present Occupation: President of small corporation, San Antonio, Tex.

Address: 1107 Central Trust Bldg., San Antonio, Tex.; home, 1829 Kolorama Road, Washington, D. C.

James H. Doolittle

DOOLITTLE, JAMES H., 1st Lieut., Air Service; born, Alameda, Calif., Dec. 14, 1896; son of Frank H. Doolittle and Rosa C. Doolittle; married, Josephine E. Daniels, Dec. 24, 1917.

Educated: Manual Arts High School of Los Angeles, Calif.; University of California, three years.

Flying Rating: Reserve Military Aviator, March 5, 1918; Airplane Pilot.

War Service: Army, Oct. 6, 1917 to date.

Present Occupation: 1st Lieut., U. S. Army.

Address: Kelly Field, San Antonio, Tex.

Ladislav d'Orcy

D'ORCY, LADISLAV, Aeronautical writer; born, Fiume, Free State of Fiume, March 27, 1888; son of Emile and Charlotte (de Seckendorff) d'Orcy.

Educated: High School, Fiume; course in aeronautical engineering, Sorbonne, Paris.

Professional: 1911-1912, representative of Farman Freres in the U. S.; 1913, represented Curtiss Aeroplane Co. in the Balkans; connected with aeronautical publications from 1915 to date.

Aeronautical Activities: Contributing editor, *Aircraft* (New York), 1911-12; *Aero and Hydro* (Chicago), 1912-14; *L'Aero* (Paris), 1912-14; *Aerial Age*, Flying, 1915-16; associate editor, *Aviation and Aeronautical Engineering*, 1917-19; editor, *Aircraft Journal*, 1918-20; editor, *AVIATION*, 1920 to date; Correspondent, "All the World's Aircraft", (London), "Les Ailes" (Paris); Chief of Albany control station, New York-Toronto Airplane Race, 1919; chief of Lufbery Field control station, Pulitzer Trophy Race, 1920.

War Service: Volunteer, Foreign Legion of Franco, 1914. Honorably discharged for physical disability.

Books: "D'Orcy's Airship Manual", New York, 1917.

Member: Aero Club of America; Society of Automotive Engineers; Ligue Aeronautique de France; Aeronautical Chamber of Commerce.

Present Occupation: Editor, *AVIATION*.

Address: 225 Fourth Ave., New York; home, 5 Sheridan Sq., New York.

Donald Wills Douglas

DOUGLAS, DONALD WILLS, Aeronautical Engineer; born, New York City, 1892; son of Wm. E. Douglas and Dorothy (Locker) Douglas; married, Charlotte Ogg, 1916.

Educated: New York City schools; U. S. Naval Academy; S. B. 1914, Mass. Inst. of Tech.

Professional: Ass't in Aerodynamics M. I. T., 1914-1915; Chief Engineer, Glenn L. Martin Co., Los Angeles, Calif., 1915-1916; Chief Civilian Aeronautical Engineer, Signal Corps, 1916-1917; Chief Engineer, Glenn L. Martin Co. of Cleveland, 1917-1920; Vice President and General Manager, Davis-Douglas Co. of Los Angeles, Calif., 1920 to present time.

Aeronautical Activities: Aeronautical designer. **Member:** Society Automotive Engineers. **Present Occupation:** Davis-Douglas Co., airplane construction. **Address:** 421 Colyton St.; home, 1148 Tenth St., Santa Monica, Calif.

Hugh Chester Downey

DOWNEY, HUGH CHESTER, 1st Lieut., Air Service; born, Dobbs Ferry, N. Y., Oct. 4, 1894; son of Fred W. Downey and Annie (Gavin) Downey.

Educated: Public and high schools; engineering School, New York University.

Professional: Has been with Gallaudet Aircraft Corp., Aeromarine Plane and Motor Co., Curtiss Engineering Corp., and Suffolk Aircraft Co.

Flying Rating: Reserve Military Aviator, Aug. 1918; Airplane Pilot, Feb. 1921.

Member: Langley Field Officer's Club. **Present Occupation:** 1st Lieut., Air Service. **Address:** Langley Field, Va.; home, in care of M. Downey, Dobbs Ferry, N. Y.

Benton A. Doyle

DOYLE, BENTON A., Captain, Air Service; born, St. Louis, Mo., Feb. 27, 1886; son of Maj. M. A. Doyle and Sophie M. Doyle; married, Myra L. Greenway, May 14, 1918.

Educated: St. Louis University; Georgetown, University.

Professional: Western Manager, Frankfort General Insurance Co.

Aeronautical Activities: Training at Post Field and Barron Field.

Flying Rating: Aerial Observer, May 1918; Airplane Pilot, Jan. 1919.

Present Occupation: Captain, Air Service. **Address:** 709 Crocker Bldg., San Francisco, Calif.

Leonard H. Drennan

DRENNAN, LEONARD H., Major, U. S. Army; born, Taylorsville, Ill., Jan. 4, 1887; son of John G. Drennan and Margaret (Slater) Drennan; married, Mary Fletcher, Jan. 9, 1914.

Educated: Chicago Manual Training School; U. S. Military Academy.



Donald W. Douglas

Aeronautical Activities: Commanded Ground Officers Training School, Kelly Field; Engineer Officer, Kelly Field; J.M.A. course Rockwell Field, May 1918; Asst. Exec., Dept. Military Aeronautics, 1918; organized and took overseas Handley Page Training Station No. 1, Oct. 1918; Dept. Air Officer, Chicago, Ill. and Boston, Mass.

Flying Rating: Airplane Pilot; J.M.A. **Member:** Aero Club of America; Aero Club of Mass.; various service clubs.

Address: c/o Adjutant Gen., U.S.A., Washington, D. C.

Adolf Drey

DREY, ADOLF, Advertising; born, St. Louis, Mo., June 10, 1896; son of Adolf Drey and L. H. Drey.

Educated: Public schools of St. Louis, Los Angeles and New York; A.B. 1917, Washington University.

Professional: Assistant Secretary and Advertising Manager, Wolff-Berger Company, St. Louis, Mo.; Eastern Manager, Illustrated World of Chicago.

Aeronautical Activities: School of Aeronautics, Champaign, Ill.; School of Aeronautics, Oxford, England.

Flying Rating: Qualified Reserve Military Aviator; passed Junior Military Aviator tests.

War Service: Attached to Royal Air Force (British), Oct. 1917 to Jan. 1919, (flying); member of A.E.F., Oct. 1917 to Jan. 1919.

Present Occupation: Advertising Manager. **Address:** 120 Fifth Avenue; home, 95 Hamilton avenue, New Rochelle, N. Y.

Laurence La Tourette Driggs

DRIGGS, LAURENCE LA TOURETTE, Lawyer, born, Saginaw, Mich., Dec. 1, 1876; son of Leroy Channing Driggs and Mary (La Tourette) Driggs; married Mary Ogden, June 29, 1904.

Educated: Public schools, Portland, Ore.; University of Michigan, 1899, New York Law School 1900.

Professional: Practiced law in New York 1900-1913 as trial attorney for Brooklyn Heights Railroad Co.; Special Deputy Attorney General in trial of Election frauds; member Market Commission; frequently appointed receiver and trustee in bankruptcy by Federal Court; bought and operated O Bar ranch in Texas, 1913-1916; developed with Driggs Ordnance Co. the Driggs one-pounder airplane gun, 1916.

Aeronautical Activities: Taught to fly by Stevenson McGordon, 1913; in Germany studying flying 1914 when war broke out; began writing special articles on war aviation, 1916; was guest of British Government as Aviation expert, 1916; spent last six months of war as guest of the Allied Gov'ts. in the field, including a cruise on the Grand Fleet. Founded, American Flying Club at the front and became its first president 1919; re-elected, 1920; organized New York-Toronto Airplane race and Reid-Towers Dinner, 1919; Armistice Dinner, Aviator's Ball, College Aviator's race; organized many branches of American flying clubs throughout the country. Lectured on aviation in various cities, and contributed articles on aviation to the leading magazines of the United States and England. He had over 100 hours in the air, and has flown in all types of airplanes in the United States and overseas; Organized and commanded 102nd Squadron, 1921; Lieut. Col. N.Y.G. 1921, Pres., New York Flying Corps.

Books: "Eyes of the Army and Navy" with Munday; "Arnold Adair, American Ace"; "Heroes of Aviation"; "Fighting the Flying Circus" with Rickenbacker; "Golden Book of Aviation"; "Short Flights"; "Arnold Adair with the English Aces".

Member: Army and Navy Club, Apawamis Golf, Chevy Chase, Cosmos (Wash.) Archie Club (Boston), Royal Air Force Club (London), Sons of Revolution, Colonial Wars, 1812 Society, St. Nicholas, Huguenots, Pilgrims, various local Aviation Clubs.

Address: Home, 1006 Fifth Ave., New York.

John Raymond Drumm

DRUMM, JOHN RAYMOND, 1st Lieut., Air Service; born, Mt. Nebo, Pa., May 20, 1889; son of John M. Drumm and Sara A. Drumm.

Educated: Public schools; four years, normal schools; B.S., B.Pd., College.

Professional: Taught course in Scientific Agriculture, five years.

Aeronautical Activities: Training; testing; cross-country flights; border patrol; photography.

Flying Rating: Airplane Pilot.

War Service: Air Service since July 7, 1917.

Present Occupation: 1st Lieut., Air Service.

Address: Mt. Nebo, Pa.

Arthur William Duckstein

DUCKSTEIN, ARTHUR WILLIAM, Advertising; born, Philadelphia, Pa., Feb. 24, 1890; son of Anthony P. Duckstein and Caroline (Mallon)



Lawrence LaT. Driggs

Duckstein; married, Marie Louise Keemle, Nov. 5, 1914.

Educated: Public schools of Philadelphia; Central High School Philadelphia; University of Pennsylvania, 2 years.

Professional: 1908, Artist, Philadelphia "Inquirer", "Evening Telegraph", Baltimore "News"; 1912, advertising, A. McKim Ltd., Toronto, Canada and London, England.

Aeronautical Activities: Cadet, Fort Sill, Okla., Sept. 17, 1917 to Dec. 1917; 1st Lieut., A. S. S. R. C., Gondrecourt, Cazaux, Coetquidan, France, Jan. 1918 to July 1918; 1st Aero Squadron, A. E. F., July to Oct. 1918.

Flying Rating: Aerial Observer, A. E. F., 1918. **War Service:** St. Mihiel Offensive; three Major Offensives and Defensive Sector.

War Honors: Distinguished Service Cross for extraordinary heroism in action between Montrebeau and Exermont, France, Sept. 29, 1918. While on a special command reconnaissance to ascertain whether or not there was any concentration of enemy troops between Montrebeau and Exermont which might indicate a possible counter-attack, he obtained information of the very greatest value. Flying over the enemy's lines at an altitude of less than 200 meters, in spite of most unfavorable atmospheric conditions, in the presence of numerous enemy aircraft, and under continuous heavy rifle and machine-gun fire from the ground, he spotted enemy troops massed for counter-attack, and, although severely wounded by a machine-gun bullet from the ground, continued his mission until he had clearly and accurately located their position. He then returned and, though suffering from the pain of his wound, succeeded in writing out and dropping a clear and complete message. The counter-attack, launched shortly afterward by a fresh enemy division, was crushed, and the accurate and timely information brought back by Lieut. Duckstein, after a very gallant fight under highly adverse conditions, was of the greatest importance in this success; Official credit, destruction of enemy ship, Sept. 15, 1918.

Member: Aero Club of America.

Present Occupation: Advertising (Picard & Co., Inc.). **Address:** 16 W. 46th St., New York City.

James Earle Dunlap

DUNLAP, JAMES EARLE, Novelty Business; born, Lompoc, Calif., April 27, 1891; son of A. T. Dunlap and Cicely (Thomas) Dunlap.

Educated: McColl High School, McColl, S. C.; Hartsville High School, Hartsville, S. C.; B.S. in Chemistry, 1914, Clemson A. and M. College, Clemson, S. C.

Professional: Teaching; U. S. Department of Agriculture, Sweetwater, Tenn., 1914-1917.

Aeronautical Activities: Entered First Officers Training Camp, Ft. Oglethorpe, Ga., May 1917; Captain, I. R. C., Aug. 1917; transferred from Infantry to Captain, A. S. R. C. and assigned to 129th Aero Squadron as C. O. and transferred to Taylor Field; appointed Adj., Park Field, March 1919; discontinued flying one week before would have received R. M. A. rating.

War Service: U. S. Air Service, May 1917 to May 1919; discharged May 10, 1919 and appointed Major, A. S. R. C.

Present Occupation: Southern Novelty Co.
Address: Hartsville, S. C.

Lionel H. Dunlap

DUNLAP, LIONEL H., 1st Lieut., Air Service; born, Mt. Pleasant, Mich., June 28, 1894; son of Henry C. Dunlap and Mary Dunlap; married, Ethel Margaret Metcalfe, May 14, 1921.

Educated: Central Normal Training School, Mt. Pleasant, Mich.; Mt. Pleasant High School; Central Normal of Michigan; Western State Normal of Michigan.

Professional: Taught manual training, mechanical drawing and coached athletics in the Ionia Michigan High and Public Schools; worked as designer for the Packard Motor Co. of Detroit.

Aeronautical Activities: Ground School, Wilbur Wright Flying Field, 1917 for flying training; commissioned and acted as an instructor in bombing; transferred to the Gunnery School at Talliaferro Field, after completing the course, acted as instructor in aerial gunnery; overseas to school at Clermont Ferrand, France for further instruction in bombing; transferred to the 96th Aero Squadron, Maulan Petite, France; Feb. 1920, assigned to the 14th Squadron for bombing tests.

Flying Rating: Reserve Military Aviator, April 23, 1918; Airplane Pilot.

War Service: As above.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service.

Address: Lansing, Mich.

Delmar H. Dunton

DUNTON, DELMAR H., 1st Lieut., Air Service; born, Detroit, Mich., Nov. 1, 1890; son of Delmar H. Dunton and Blanche Dunton.

Educated: Public schools of Detroit, Mich.

Professional: Automobile business.

Aeronautical Activities: Flying cadet, April 5, 1918 to Aug. 3, 1918; commissioned, Aug. 3, 1918; Air Service to date.

Flying Rating: Reserve Military Aviator, Aug. 3, 1918.

Present Occupation: 1st Lieut., Air Service.

Address: 5044 Grant Court, Detroit, Mich.

Thomas Fenton Dunn

DUNN, THOMAS FENTON, Dean; born, Cadillac, Mich., Oct. 9, 1886; son of Michael B. Dunn and Susan May Dunn; married, Oct. 22, 1918.

Educated: Public schools; St. Francis Academy, Toledo; University of California.

Professional: Railroad Messenger to Traffic Manager; Corporation Purchasing Agent; Constructing Engineer on bridges and highways; topographer, commercial aviation, designing, construction and operation of airplanes; commercial aviation projects.

Aeronautical Activities: 1916-1917, Experimental work on Aero Photo Maps; 1917, enlisted in Aviation Section, Signal Corps; flying instructor; combat gunners pilot; discharged Dec. 1918; entered commercial aviation field, Jan. 1919; 1920, established first commercial air line between Detroit and Cleveland, Aug. 1920; carried mail and merchandise; established aeronautical course, University of Detroit.

Flying Rating: Aero Club of America License No. 1633.

Member: Aero Club of America; University Club (Detroit) Aviation Country Club, Detroit; Radio Research Club (Detroit); American Meteorological Soc.

Present Occupation: Dean, Department of Aeronautics, University of Detroit.

Address: 630 Jefferson Ave. E., Detroit, Mich.; home, 1924 Calumet Ave., Toledo, Ohio.

William Frederick Durand

DURAND, WILLIAM FREDERICK, Professor; born, Bethany, Conn., March 5, 1859; son of William L. Durand and Ruth (Coe) Durand; married, Charlotte Kneen.

Educated: U. S. Naval Academy, 1880; Ph. D., Lafayette College, 1888.

Professional: Engineer Corps, U. S. Navy, 1880-1887; professor of Mechanical Engineering, Agricultural & Mechanical College, Mich., 1887-1891; Professor of Marine Engineering, Cornell University, 1891-1904; Professor of Mechanical Engineering, Leland Stanford Junior University 1904 to date.

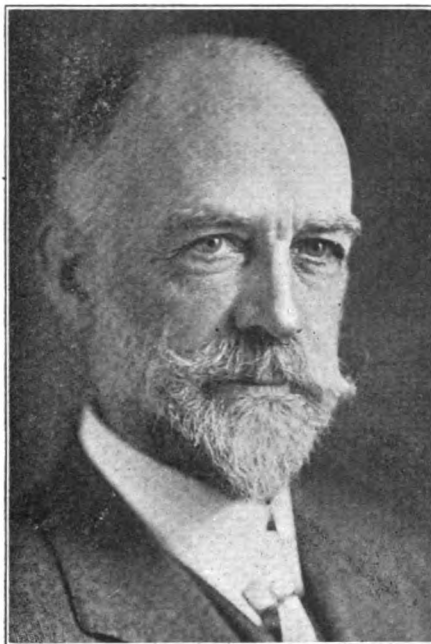
Aeronautical Activities: Appointed by President Wilson in 1915 one of the original twelve members of the National Advisory Committee for Aeronautics; elected chairman of the committee in 1916; re-elected in 1917; Scientific Attache to the American Embassy, Paris, during war.

Books: Fundamental Principles of Mechanics (1889); Resistance and Propulsion of Ships (1898); Practical Marine Engineering (1901); Motor Boats (1907); Experimental Research on Air Propellers I to V inclusive, published as Reports 14, 30, 64, 109, 141 of the N. A. C. A.

Member: National Academy of Sciences; American Philosophical Society of Mechanical Engineers; Society of Naval Architects and Marine Engineers; Societe Technique Maritime; life member and gold medalist, American Society of Naval Engineers; fellow, American Association for the Advancement of Science.

Present Occupation: Professor of Mechanical Engineering, Leland Stanford Junior University; member National Advisory Committee for Aeronautics.

Address: Stanford University, Calif.



William F. Durand

George Haven Durar

DURAR, GEORGE HAVEN, Lithographing; born, Dripping Springs, Tex., Oct. 20, 1888; son of Harold Cantelo Durar and Madeline Huston (Woodward) Durar.

Educated: 1909, Plainfield high school; New York University.

Professional: Western Electric Co., U. S. Steel Corp.; Trade Lithograph Co.

Aeronautical Activities: Dec. 1916, Kelly Field, R. M. A. tests and instructor's school; Post Field, artillery observation and photography; Selfridge Field, aerial gunnery and pursuit; Ellington Field, bombing and night flying; at present, 1st Lt. in Aviation Section of Signal Reserve Corps.

Flying Rating: Reserve Military Aviator, Feb. 1917.

War Service: Oct. 22, 1916 to Jan. 1918.

Member: Aero Club of America.

Present Occupation: Salesman, Trade Lithograph Co.

Address: 112 East 19th St.; home, 290 East 12th St., New York City.

Arthur E. Easterbrook

EASTERBROOK, ARTHUR E., Captain, Air Service; born, Amsterdam, N. Y., Nov. 4, 1893; son of Edmund B. Easterbrook and Fannie Easterbrook; married, Gertrude L. Augustine, May 1, 1920.

Educated: Port Townsend High School; three years, University of Washington.

Aeronautical Activities: Aerial School for Ob-

servers, Fort Sill, 1918; 9th Squadron, R. A. F.; First Aero Squadron, July 1918 to June 1919; 12th Aero Squadron, Oct.-Dec. 1919; First Surveillance Group, 1920; Office of 8th Corps Area Air Service, April 1920 to Nov. 1920; Commanding Officer, 50th Squadron (Observation), Langley Field, Va. to date.

Flying Rating: Aerial Observer, March 1918; Reserve Military Aviator, May 1919; Airplane Pilot, Feb. 1923.

War Honors: Distinguished Service Cross, Oct. 3, 1918; Oak Leaf Cluster to be worn with D. S. C., Jan. 15, 1919; Croix de Guerre, April 22, 1919.

Member: Hon. member, Aerial Club of the Northwest.

Present Occupation: Captain, Air Service.

Address: Langley Field, Va.

John L. Eaton

EATON, JOHN L., Air Mail Pilot; born, San Francisco, Calif., July 12, 1898; son of Henry V. Eaton and Emma M. Eaton.

Educated: Private schools.

Aeronautical Activities: Course in Aerodynamics and Aeronautical Engineering; Ground School, Berkeley, Calif., May 1917; Primary Flight, San Diego; Instructor and Officer in Charge of Stages, Call Field, Oct. 1917 to July 1918; Test Pilot, Acceptance Park, Detroit and Dayton, Ohio; discharged Feb. 1918.

Flying Rating: Reserve Military Aviator, Oct. 1917.

War Service: Air Service, U. S. A., May 1917 to Feb. 1919.

Member: Pacific Aero Club; Aero Club of America.

Present Occupation: Air Mail Pilot since Sept. 1920.

Address: Air Mail Service; home, 705 Humboldt St., Reno, Nev.

Warren S. Eaton

EATON, WARREN S., Consulting Aeronautical Engineer; born, Rapid City, S. D., June 12, 1891; son of Frank J. Eaton and Annetta (Paine) Eaton; married, Pearl DeEtte Lerch, May 11, 1918.

Educated: South Dakota and California public schools; Polytechnic Institute, Los Angeles, Calif.

Professional: Engineer and aviator instructor and general manager of Eaton Bros. Airplane Co., 1908 to May 1912; designing engineer for Roy Knabenshue Dirigible Co., 1912-1913; engineer for Glenn L. Martin, 1913-1914; engineer, Lincoln Beachy, 1914-1915; chief engineer, N. Y. Aero Construction Co., 1915-1917; engineering department, Air Service, June 1917 to Dec. 1917; appointed by Production Division, Aircraft Production Board as factory and production engineer at St. Louis, Mo., Dec. 1917 to Oct. 1918; chief draftsman and engineer, Production Engineering Division, Air Service, Oct. 1918 to April 1919; chief engineer, Chaplin Aircraft Corp., July 1919 to Jan. 1920.

Aeronautical Activities: Built gliding models, 1900 to 1905; power flying models, 1905 to 1906; built and flew gliders 1906-1907; formed Eaton Bros. Airplane Co., Los Angeles, 1908, which built and entered machine in first aviation meet held in America at Los Angeles, Dec. 1909 to Jan. 1910; Eaton Bros. built 43 machines for exhibition flyers from 1909 to May 1912; designed, built and flew with Roy Knabenshue a twelve passenger airship in 1913; built first successful loop plane in America for Lincoln Beachy, 1914, remaining with him as engineer until March 1915; organized New York Aero Construction Co., Nov. 1915, holding position as chief engineer until June 1917; appointed chief draftsman and engineer, Production Engineering Division.

Present Occupation: Consulting Engineer and private experiments.

Address: 915 Higgins Bldg., Los Angeles, Calif.; home, Van Nuys, Calif.

Oliver Patton Echols

ECHOLS, OLIVER PATTON, Capt., Air Service; born, Charlottesville, Va., March 4, 1892; son of Wm. H. Echols and Mary B. Echols; married, Margaret Bailey, Dec. 28, 1920.

Educated: Prep. school; Episcopal high school; Virginia Polytechnic Institute; University of Virginia.

Professional: Engineering Dept., Dupont Powder Co., 1913; Instructor at the Emerson Institute, Washington, D. C., 1914 and 1915; commissioned 2nd Lieut., U. S. Army, 1916.

Aeronautical Activities: U. S. Air Service.

Flying Rating: Aerial Observer.

War Service: Aerial Observer with 1st Aero Squadron at front, 1918; Group Commander 1st Observation Group; Commander, Air Service, 1st Army Corps, A. E. F.; citation by General Pershing.

Present Occupation: Capt. U. S. Army.

Address: Fort Sam Houston, Tex.; home, University of Va., Charlottesville, Va.

Oswald Adolph Eckhardt

ECKHARDT, OSWALD ADOLPH, Office Equipment; born, Green Bay, Wis., Aug. 1, 1892; son of Oswald Eckhardt and Christine (Bader) Eckhardt.

Educated: Green Bay public and high schools; A. B.; June 22, 1920, Beloit College.

Professional: Member of firm of Eckhardt Bros.

Aeronautical Activities: Commissioned 2nd Lieut. A. S. S. O. R. C., Nov. 27, 1917; training school, Kelly Field; Adjutant to Commanding Officer, Conclaux Barracks, Saint Maxient until March 30, 1918; with the Survey Division at headquarters, Air Service, Z. O. A., locating air-drome sites; salvaging wrecked planes, Z. O. A.; Asst. Officer in Charge of Air Service Transportation Division, Z. O. A.; July 19 to Aug. 1, on Convoy duty, transporting ammunition to the front in the Aisne-Marne offensive; Officer in Charge of Air Service Transportation Division, Z. O. A.; Motor Transport Officer Third Army of Army Air Service; promoted to 1st Lieut., March 18, 1919; Commissioned Capt., A. S. S. O. R. C., Dec. 8, 1919.

War Service: Aug., 1917 to Aug., 1919.

War Honors: Cited in General Orders No. 2, Headquarters, Air Service, Army Group, A. E. F., Nov. 11, 1918.

Address: 223 Washington St.; home, 203 S. Monroe Ave., Green Bay, Wis.

Charles Jerome Edwards

EDWARDS, CHARLES JEROME, Executive; born, Township of Arcadia, Wayne Co., N. Y., May 8, 1886; son of Lora Edwards and Mary Edwards; married, Edith Wendell, Aug. 26, 1920.

Educated: Public schools.

Professional: Life Insurance, Mgr. Equitable Life Assurance Society, March 15, 1886; Vice President, N. Y. Plate Glass Ins. Co.; Vice President, Manhattan Bridge Three Cent Railway Line; Director of Mechanics Bank of Brooklyn, and Roosevelt Savings Bank; City of New York Ins. Co.; Morris Plan Co.; New York Title and Mortgage Co.; Brooklyn Warehouse Co.

Aeronautical Activities: Charter Member, Aero Club of America, Nov. 1905; Treasurer, Nov. 1906 to 1912; Vice President, 1912-1922.

Member: President, Brooklyn Club; President, Rotary Club of Brooklyn, 1916-1920; Bankers Club; Lawyers Club.

Present Occupation: Manager, Equitable Life Assurance Society (Brooklyn).

Address: 204 Montague St.; home, 131 Remsen St., Brooklyn, N. Y.

Clairemont Leroy Egtvedt

EGTVEDT, CLAREMONT LEROY, Aeronautical Engineer; born, Stoughton, Wis., Oct. 18, 1892; son of Sover P. Egtvedt and Mary (Ruble) Egtvedt.

Educated: High School; University of Washington, Colleges of Civil and Mechanical Engineering.

Professional: Concrete building construction, 1914; 1915 and 1916, design and construction of boilers, shiptanks and structural steel.

Aeronautical Activities: Airplane design, June 1917; Assistant Engineer, Boeing Airplane Co., Aug. 1917; Chief Engineer, Boeing Airplane Co., Dec. 1918.



Charles J. Edwards

Member: Aero Club of Northwest; Society of Automotive Engineers; Royal Aeronautical Society; Wissenschaftliche Gesellschaft Fur Luftfahrt; College Club.

Present Occupation: Chief Engineer, Boeing Airplane Co.

Address: Boeing Airplane Co.; home, 7305 - 25th Ave., N. W., Seattle, Wash.

George Hamilton Eichelberger

EICHELBERGER, GEORGE HAMILTON, Attorney at Law; born, Urbana, Ohio, Jan. 24, 1877; son of George Maley Eichelberger and Emma (Ring) Eichelberger; married, Frances Dodge, Aug. 11, 1908.

Educated: Urbana High School; Urbana University; Ohio Wesleyan University.

Professional: Attorney at Law; practiced law in Cleveland, Ohio since 1901.

Aeronautical Activities: Captain, Air Service, Nov. 1917; assigned to duty with Signal Offices, Port of Embarkation, N. Y.; placed in charge of office; given charge of Air Radio Supply Depot and Air Photographic Supply Depot, N. Y.; promoted to Major, Air Service, Aug. 1918, and placed in command of Aviation General Supply Depot at Little Rock, Ark.

Present Occupation: Attorney at Law.

Address: 905 Kirby Bldg.; home, 2732 East Overlook Road, Cleveland, Ohio.

Richard I. Elliott

ELLIOTT, RICHARD I., Engineer; born, Morristown, N. J., Nov. 22, 1869; son of William St. George Elliott and Annie Rankin (Lee) Elliott; married, Jennie Mae Conn, Sept. 20, 1899.

Educated: Private schools in Germany, Switzerland, and England; University College, London; 1890, Technical Institute of London.

Professional: Engineering (electrical and mechanical) 1890-1896; Patent Attorney, 1896-1917; Airplane Engineering and experimental work, 1910 to date.

Aeronautical Activities: Senior Inspector and Aeronautical Mechanical Engineer from beginning of war, at Boeing Airplane Co., Seattle, Wash.; Dayton district office; West Virginia Aircraft Co.

Present Occupation: Aeronautical Engineer and Patent Attorney—Consulting Practice.

Address: 607 Rust Bldg., Tacoma, Wash.

Daniel Eric Ellis

ELLIS, DANIEL ERIC, Lawyer; born, Meeker, Colo., March 17, 1893; son of Charles F. Ellis and Adella (Craig) Ellis; married, Thelma Lea Townes, Nov. 16, 1918.

Educated: 1916, A. B., University of California; 1917, University of Southern California; 1919, University of Denver.

Professional: Admitted to the bar, State of Mississippi, July 1920; practiced law in Oklahoma 1920-1921.

Aeronautical Activities: June 30, 1917, completed Ground School, University of California; commissioned 1st Lieut. A. S. S. O. R. C., Gerstner Field, La., Jan. 7, 1918; duty: Instructor, dual control, acrobatics, army corps, cross country, instructors school, combat; Stage Commander; Field Commander.

Flying Rating: Reserve Military Aviator, Rockwell Field, San Diego, Calif.; Aero Club of America Pilot Certificate No. 954; expert Certificate No. 125.

War Service: Enlisted Private 1st Cl. A. S. S. E. R. C., May 28, 1917; Commissioned 1st Lt. Reserve Military Aviator, Jan. 7, 1918; discharged Jan. 9, 1919.

Member: Aero Club of America; Pacific Aero Club; Aerial League of America.

Present Occupation: Lawyer.

Address: Glendora, Miss.

Sam Love Ellis

ELLIS, SAM LOVE, 1st Lieut., Air Service; born, Knoxville, Tenn., Dec. 11, 1895; son of Mr. T. N. Ellis and Mrs. T. N. Ellis.

Educated: Knoxville High School; two years, University of Tennessee.

Aeronautical Activities: Started training, Sept. 1917 at Hazelhurst Field, L. I.; finished Pursuit training at Gerstner Field, July 1918; Pursuit training at Issoudun, France, Nov. 1918; assigned to Pursuit Group, Oct. 1919.

Flying Rating: Airplane Pilot.

War Service: Army, May 8, 1917 to present date.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Theodore Gordon Ellyson

ELLYSON, THEODORE GORDON, Commander, U. S. Navy; born, Richmond, Va., Feb. 27, 1885; son of Henry Theodore Ellyson and Lizzie (Walker) Ellyson; married, Helen Mildred Lewis Glenn, Nov. 15, 1912.

Educated: McGuire's School, Richmond, Va.; U. S. Naval Academy.



Theodore G. Ellyson

Professional: Graduated Jan. 30, 1905; duty on battleships, Atlantic Coast and Asiatic station until Nov. 1906; in command of gunboats Asiatic Station until Nov. 1908; in command of submarines until Dec. 1910; Began U. S. Naval Aviation and in command of Operations until June 1913; Battleship duty to July 1915; Instructor Naval Academy to Feb. 1918; Plymouth Eng. to April 1919 with Submarine Chasers; Destroyer command to Jan. 1921; Present, Executive of Air Station, Hampton Roads, Va.

Aeronautical Activities: Development of Naval Aviation from 1910 to 1913 including development of first hydro-aeroplane with Glenn H. Curtiss, and Navy Compressed Air launching device; First Naval officer to be trained in flying; was one of the first Navy flyers to take part in fleet maneuvers at Guantanamo in 1913 which is considered the start of Naval Aviation.

Flying Rating: Aero Club of America, Aviators license No. 28; Aero Club of America, Military Aviator; Navy Department, Naval Aviator No. 1.

War Service: Plymouth, England, with Sub. Chasers.

War Honors: U. S. Navy Cross.

Member: Army and Navy Club (Wash.).

Present Occupation: Executive Officer, Naval Air Station, Hampton Roads, Va.

Address: Naval Air Station, Hampton Roads, Va.

Waldo Daniel Emery

EMERY, WALDO DANIEL, Machine Designer; born, Lynn, Mass., March 12, 1897; son of Joseph Emery and Cora (Southwick) Emery.

Educated: Providence Technical High School; Rhode Island State College.

Professional: Machine designer, Simplex Tool Co., 1919 to date.

Aeronautical Activities: Graduate Princeton Ground School, June 1918; training at Dann Field, Southern Field, and Kelly Field, Aug. 1918 to Jan. 1919.

Flying Rating: Reserve Military Aviator, April 1919.

Present Occupation: Machine designer.

Address: 27 Rockland Ave., Woonsocket, R. I.

Harold H. Emmons

EMMONS, HAROLD H., Lawyer; born, Detroit, Mich., June 30, 1875; son of Marcus A. Emmons and Alma M. (Slaven) Emmons; married, Marion C. Scotten, Feb. 10, 1910.

Educated: Detroit Grammar and High School; University of Michigan, Literary Department, 1897, Law Department, 1899.

Professional: Walker & Spalding, July-Oct. 1899; Maybury & Lucking, Oct. 1899 to Jan. 1903; Member, Maybury, Lucking, Emmons & Helfman, Jan. 1903 to May 1913; Sec. and Treas. Regal Motor Co., May 1913 to Jan. 1917; Member, Clark, Emmons, Bryant & Klein to date; since leaving service, Director, Scotten-Dillon Co., Guaranty Trust Co., Signal Motor Truck Co., Detroit Motorbus Co., Berry Bros., Welded Steel Barrel Corp., Diamond Specialty Co., of Detroit.

Aeronautical Activities: Chief of Engine Production Department, Aircraft Production Board of the Army, in charge of the production of all aviation engines for both Army and Navy.

War Service: Landsman, Ensign, Lieutenant (j. g.) and Lieutenant, Detroit Naval Reserves; Lieutenant, Federal Naval Reserves, 1917; retired as Lieutenant Commander.

Honors: Distinguished Service Medal, U. S.; Honorable Mention, British Government.

Member: Detroit Athletic Club, Detroit Boat Club, Detroit Golf Club, Bloomfield Hills Country Club, The Lawyer's Club, Delta Chi Legal Fraternity, Detroit and Michigan State Bar Assoc., Sons of the American Revolution, American Legion, Military Officers of the Great War, Society of Automotive Engineers, Detroit Aviation Society, Society of Colonial Wars.

Present Occupation: Attorney and Counsellor at Law.

Address: 4430 Cass Ave., Detroit, Mich.

Otto Enderton

ENDERTON, OTTO, Commercial Aviator; born, Knob Hill, Calif., April 21, 1897; son of William H. Enderton and Ollie M. Enderton.

Educated: High school, Nogales, Ariz.; State Normal School, Tempe, Ariz.

Professional: Hoisting and Steam Engineer, Commercial Aviation since March 28, 1919.

Aeronautical Activities: Located Marine Flying Field, Miami, Fla. during year 1918 until March 1919, flew JN4H, H boats, etc.; engaged commercial aviation since that time; employed by Kokomo Aviation Co., Kokomo, Ind., Clinton, Ind., Arizona Aviation Co., Tucson, Ariz., Apache Aerial Transportation Co., Phoenix, Ariz., Barr's Flying Circus, Venice, Calif.; now in business operating under name of Kande Co.

War Service: Marine Aviation duration of the War.

Member: Aero Club of Southern California.

Present Occupation: Commercial Aviation.

Address: Yuma, Ariz.

Harry Alexander Erickson

ERICKSON, HARRY ALEXANDER, Photographer; born, Helsingborg, Finland, Aug. 16, 1884; son of Frank O. Erickson and Anna Erickson; married, Mayme Korherr, June 2, 1913.

Educated: Public and high schools.

Professional: Photographic work from 1900 to date.

Aeronautical Activities: Photographic Officer.

Flying Rating: Observer, 1917; Pilot, 1919.

War Service: Air Service, June 1917 to Jan. 1920.

Present Occupation: Photographer.

Address: Hotel Del Coronado, Coronado, Calif.; home, 420 N. 28th Street, San Diego, Calif.

Frederick Gordon Erney

ERNEY, FREDERICK GORDON, Athletic Instructor; born, Del Rio, Tex., July 19, 1891; son of Thomas Erney and Annie (Gordon) Erney.

Educated: Public schools of Del Rio and Galveston, Tex.; Southwest Texas State Normal College, 1914; University of Texas; University of Kansas.

Professional: Teacher in country schools three years; 1914 to date, high school Science Teacher and Athletic Director.

Aeronautical Activities: S.M.A., Austin, Tex., Dec. 1917 to Feb. 1918; training at Camp Dick, Kelly Field and Brooks Field; Flying Instructor, Call Field.

Flying Rating: Certificate No. 5319, 1919.

War Service: As above.

Present Occupation: Director of Athletics, Cleburne High School.

Address: Cleburne, Tex.; home, Del Rio, Tex.

Mentor Etnyre

ETNYRE, MENTOR, Motion Picture Producing business; born Ashton, Ill., Sept. 28, 1885; son of Fred Etnyre and Lellia (Bly) Etnyre; married, Carita A. Goeth.

Educated: Two years high school and special work.

Professional: Organization work and business management.

Aeronautical Activities: 1917-1919, training at Kelly Field, Camp Dick, Ellington Field.

Flying Rating: Reserve Military Aviator, June 1918.

War Service: Army, May 1917 to Feb. 1919.

Present Occupation: Business Manager, Austin Film Library, Inc., Austin, Tex.

Address: 807 Littlefield Bldg.; home, 307 West 7th St., Austin, Tex.

Francis Thomas Evans

EVANS, FRANCIS THOMAS, Maj., U.S.M.C.; born, Delaware, Ohio, June 3, 1886; son of F. T. Evans and Alice (Brown) Evans; married, Elizabeth Kibbey, June 12, 1917.

Educated: Delaware High School; Ohio Wesleyan, 3 yr.

Professional: 2nd Lieut., Jan. 1909 to Sept. 1913; 1st Lieut., Sept. 1913 to Aug. 1916; Capt.,

Aug. 1916 to June 1920; Maj. June 1920 to date; temporary Maj., July 1918.

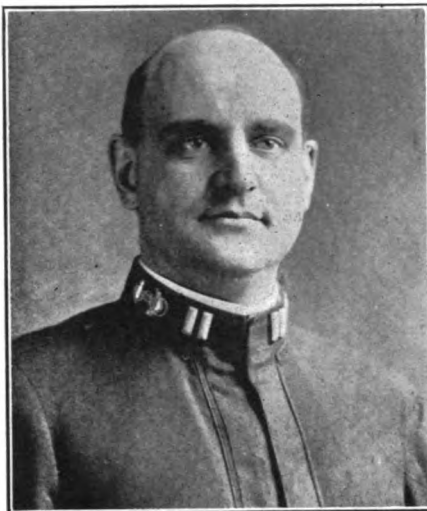
Aeronautical Activities: Began flying, Pensacola, July 2, 1915; C.O., N.A.S., Cape May, Aug.-Dec. 1917; C.O., air detachment, Ponta del Gada, Azores, Jan.-July 1918; C.O., Marine Flying Field, Miami, Aug. 1918 to April 1919; C.O., Marine Flying Field, Quantico, July 1919 to March 1921; C.O., 4th Air Squadron, Port au Prince, Haiti, April 1921 to date.

Flying Rating: Naval Aviator, No. 26; Navy Air Pilot, No. 22.

War Service: April 6, 1917 to Nov. 11, 1918.

Present Occupation: C.O., 4th Air Squadron, U.S.M.C.

Address: Port au Prince, Haiti; home, Delaware, Ohio.



Harold H. Emmons

Bruce Swomley-Eytinge

EYTINGE, BRUCE SWOMLEY, Test Pilot; born, New Oxford, Pa., April 4, 1893; son of Anthony S. Swomley and Ella (Neely) Swomley; married, Dorothy Dilworth, Sept. 5, 1917.

Educated: Public schools, Gettysburg, Pa.; Morris High School, N. Y.; University of Toronto School of Military Aeronautics.

Professional: Salesman, 1910-1914; 1915-1916, invented three different Motor Roller Skates, equipped with single cylinder $\frac{1}{4}$ hp. gas engine, twin cylinder, 1 hp. gas engine and the other powered by electric motors and storage batteries; entered automobile business in 1916.

Aeronautical Activities: April 1917, enlisted in automobile section of Quartermasters Corps, U. S. Army; July, enlisted as (American) Cadet in Royal Flying Corps; solo flight, Oct. 14, 1917, Camp Mohawk, Deseronto, Canada; completed flying course at Ft. Worth, Tex.; commissioned 2nd Lieut., Feb. 13, 1918, as Flying Officer at Camp Leaside, Toronto, Canada; promoted 1st Lieut., April 1, 1918, instructing the Gosport system at Camp Rathburn, Deseronto, Canada; relinquished commission Nov. 23, 1918; Dec. 1918, became test pilot of Aircraft Engineering Corp.; 1920, tested Pioneer plane with Ford motor; tested Orenco 4 seater; tested 1920 model ACE single seater; tested side-by-side seater, Linderman plane; 1921 tested BaCo; has flown 17 types.

Flying Rating: Royal Air Force Certificate; Aviators Certificate, 1917, Aero Club of America.

War Service: Honorary Lieut., R. A. F., Nov. 23, 1918.

Books: "Landing Field Guide and Pilot's Log Book," 1920; "Eytinge's Flying Guide," 1921.

Member: Aero Club of America; Capt., New York City Aerial Police.

Present Occupation: Sales and Advertising Manager of Bethlehem Aircraft Corp., Bethlehem, Pa.

Address: 52 Vanderbilt Ave.; home, 4554 Park Ave., New York City.

James C. Fair

FAIR, JAMES C., Telephone Business; born, Natick, Mass., Feb. 7, 1885; son of Martin Fair and Mary Fair.

Educated: Public and high schools; Lowell Institute.

Professional: Telephone business.

Aeronautical Activities: Kelly Field Ground School; Eberts Flying School; Commandant of Flying Cadets, Eberts Field.

Flying Rating: Reserve Military Aviator.

War Service: Enlisted private 1st class, Sept. 14, 1917; Cadet, Kelly Field and Provisional 2nd Lieutenant; commissioned 1st Lieutenant, Dec. 1917; Commanding Officer, 181st Aero Squadron,

Kelly Field No. 2; Intelligence Officer and Officer in Charge of Military Police and prisoners, Eberts Field.

Member: Aero Club of America.

Present Occupation: Telephone & Telegraph Co., Boston, Mass.

Address: 125 Milk St., Boston, Mass.; home, 16 Wilson St., Natick, Mass.

Sherman Mills Fairchild

FAIRCHILD, SHERMAN MILLS, Manufacturer of Aerial Cameras; born, Oneonta, N. Y., April 7, 1896; son of George W. Fairchild and Josephine (Sherman) Fairchild.

Educated: Oneonta High School; Evans School; Harvard College; University of Arizona; Columbia University Engineering School.

Professional: President, Fairchild Aerial Camera Corp.

Aeronautical Activities: Inventor of Fairchild Aerial Camera and between-the-lens shutter.

Member: Aero Club of America; Aeronautical Chamber of Commerce; Harvard Club of New York City.

Present Occupation: Manufacturer of Aerial Cameras.

Address: Fairchild Aerial Camera Corp., 136 West 52 St.; home, 30 East 55 St., New York City.

Elisha Noel Fales

FALES, ELISHA NOEL, Aeronautical Engineer; born, Lake Forest, Ill., 1887; son of David Fales and Mary Engs (Lawton) Fales; married, Frances Meigs, June 4, 1914.

Educated: Lake Forest Academy; Armour Institute; A.B. 1908, Harvard University; S.B. 1911, Mass. Inst. of Tech.

Professional: 1911-1912, Stone & Webster Engineering Corp.; 1913, Ironwood & Bessemer Railway & Light Co.; 1914, Chicago Department of Public Service.

Aeronautical Activities: Wind tunnel and gliding work, Mass. Inst. of Tech., 1909-1911; Assistant to Production Engineer, Curtiss Aeroplane & Motor Co., 1916; established course in aeronautics, University of Illinois, 1917; on Major Bingham's Commission to Toronto, 1917, for development of cadet course; wind tunnel expert, U. S. Army, 1917 to date.

Books: "Learning to Fly in the U. S. Army", 1917.

Present Occupation: Aeronautical Engineer.

Address: McCook Field, Dayton, Ohio; home, 508 Westminster Ave., Lake Forest, Ill.

Arthur Douglas Farquhar

FARQUHAR, ARTHUR DOUGLAS, Insurance Business; born, Sandy Spring, Md., March 7, 1891; son of Allan Farquhar and Charlotte (Pleasant) Farquhar; married, Helen T. Nesbitt, Nov. 1, 1919.

Educated: Sherwood School, Sandy Spring, Md.; B.S. 1910, Kenyon College; Cornell University.

Professional: With Mutual Fire Insurance Co., 1912-1921.

Aeronautical Activities: Ground School University of Texas; training for Bombing Pilot in Italian flying schools.

Flying Rating: Reserve Military Aviator.

War Service: June 1917 to Dec. 1918; with 6th Italian Bombing Squadron of Capronis as pilot Jun.-Nov. 1918; commissioned 1st Lieut., Feb. 1918.

War Honors: Croce di Guerra (Italy).

Present Occupation: Insurance business.

Address: Sandy Spring, Md.

Fauna Wynne Farris

FARRIS, FAUNA WYNNE, Commercial Aviation; born, Lawrence, Kans., Aug. 25, 1889; son of David J. Farris and Annie Farris; married, Edna Ingels, May 14, 1920.

Educated: Palo Alto High School, Palo Alto, Calif.; A.B. 1917, Stanford University.

Professional: Owner and Manager, Stockton Aviation Center, Sept. 1919 to date.

Aeronautical Activities: Overseas service, July 1918 to Feb. 1919; Pilot, 24th Aero Squadron; civilian aviation, Sept. 1919 to date.

Flying Rating: French Military Brevet; Reserve Military Aviator, July 20, 1918.

War Service: French Army S.S.U. No. 10, June 1917 to Dec. 1917; A.E.F., Dec. 1917 to July 1919.

Present Occupation: Owner and Operator of Stockton Aviation Center.

Address: 2049 South California St., Stockton, Calif.

Fay Leone Faurote

FAUROTE, FAY LEONE, Advertising; born, Terre Coupe, Ind., July 26, 1881; son of George L. Faurote and Emma J. Faurote; married, Edna E. Bacon, June 12, 1907.

Educated: Niles, Mich. public schools; B. S. (M. E.) 1903, University of Michigan.

Professional: Electrician, Niles, Mich.; Asst.

Experimental Engineer, Olds Motor Works, Detroit, Mich.; Advertising Manager, Olds Motor Works, Founder and Teacher, Detroit Motor School, also Buffalo Automobile Night School; Advertising Manager, E. R. Thomas Motor Car Co., Buffalo, N. Y.; head of Copy Department, Chas. H. Fuller Co. (Automotive Advertising); Director of Plans, H. K. McCann Co., Detroit, Mich.; Manager, Detroit Office, H. E. Lesan Advertising Agency; Manager, Department of Education and Sales Promotion, Curtiss Aeroplane & Motor Corp., Curtiss Aeroplane Co., Curtiss Exhibition Co.; Editor, Aircraft Year Book; Editor, Curtiss Fuselage and Curtiss Fly Leaf, Curtiss Aeronautical Books.

War Service: Manager all educational and welfare work at nine plants and four flying fields, Curtiss Aeroplane & Motor Corp. and subsidiary companies; Director, Manufacturers Aircraft Assoc.; member, Naval Recruiting Board Buffalo district.

Books: Co-author with Arnold "Ford Methods and Ford Shops"; Author "The How and Why of the Automobile", "Busy Man's Text Book on Automobiles", "Modern Aeroplanes", "Biography of Glenn Hammond Curtiss".

Member: Society of Automotive Engineers.

Present Occupation: Specialist in Advertising Management; writer, automotive subjects.

Address: 677 Fifth Ave., New York, N. Y.; home, 116 Wellington Road, Garden City, L. I., N. Y.

Henry Francis Fawcett

FAWCETT, HENRY FRANCIS, Aviator; born, New Albany, Ind., Dec. 26, 1888; son of Oscar K. Fawcett and Harriet E. Fawcett; married, Esther R. Christena, July 3, 1918.

Education: Grammar and high schools.

Professional: Over ten years sales experience; operated wholesale business for five years.

Aeronautical Activities: Flying Instructor, Love Field, Dallas, Tex.; Officer in Charge of Primary Stage of Flying, Love Field, 1918-1919; Pilot for Service Aviation Co., April 1919 to April 1920; General Manager and Chief Pilot of Heddon Aviation Co., Dowagiac, Mich., April 1920 to date.

Flying Rating: Reserve Military Aviator.

War Service: Army Air Service, Oct. 1917 to March 1919.

Member: American Legion.

Present Occupation: Vice President and General Manager, Heddon Aviation Co.

Address: P. O. Box 120; home, 501 Green Street, Dowagiac, Mich.

James Edmond Fechet

FECHET, JAMES EDMOND, Chief of Training and Operations Group; born, Ft. Ringgold, Tex., Aug. 21, 1877; son of Edmond G. Fechet and Rachel (Forayth) Fechet; married, Catherine Luhn, April 10, 1907.

Education: Public schools of Jackson, Ohio; Worthington Academy, Lincoln, Nebr.; University of Nebraska.

Professional: Enlisted in 6th U. S. Cavalry, April 1898; discharged, Aug. 9, 1900; commissioned 2nd Lt., 9th Cavalry, Aug. 1900; 1st Lt., 1911; Capt., March 1911; Maj., June 1920; Lt. Col., July 1922.

Aeronautical Activities: Started flying, Oct. 1917.

Flying Rating: Junior Military Aviator, Nov. 1918; Airplane Pilot, June 1920.

War Service: Lt. Col. A. S. S. C., Aug. 1917; Col., Feb. 1918; Commanding Officer, Scott Field, Carlstrom Field, Dorr Field, and Kelly Field; Supervisor of Aeronautics for Southwest, Sept. 1918 to May 1919.

Member: Army and Navy Club (Wash.).

Present Occupation: Chief of Training and Operations Group-Office; office of Chief of Air Service.

Address: Munitions Bldg.; home, 8614 McKinley St., N. W., Washington, D. C.

William M. Fellers

FELLERS, WILLIAM M., Aeronautical Engineer; born, Macon, Ga., May 26, 1889; son of Wm. F. C. Fellers and Lily (McCarrel) Fellers.

Education: Dural County, Fla. public schools; B.S. in M.E. 1910, and M.E. 1920, Georgia School of Technology.

Professional: General engineering, 1910-1915. **Aeronautical Activities:** Aeronautical Draftsman; Chief Aeronautical Draftsman, Naval Air Station, Pensacola, Fla., 1915-1918.

Flying Rating: Naval Aviator, March 1919.

War Service: Lt. (j.g.) U.S.N.R.F.-5, in charge Experimental Department, Hampton Roads, Va.

War Honors: Citation and Navy Cross.

Member: Associate member, American Society of Mechanical Engineers.

Present Occupation: Assistant to Chief Engineer, N.A.F., in charge Catapult Design.

Address: Naval Aircraft Factory, Philadelphia, Pa.

William Shaw Ferdon

FERDON, WILLIAM SHAW, Rancher; born, Braintree, Mass., March 31, 1896; son of William Herbert Shaw and Mary V. D. (Ferdon) Shaw; name of William Shaw Ferdon, changed from that

of W. F. Shaw to W. S. Ferdon in 1917 because of adoption by William Ferdon.

Education: High schools and preparatory schools.

Professional: Operated chain of ranches; National Cattle Commission business.

Aeronautical Activities: Organized Panhandle Airplane Co., Amarillo, Tex., manager until June 1920; in 1919 appointed Chief of Associated Municipal Aerial Committees (a group of over 100 southwestern cities in aerial activities).

Flying Rating: Reserve Military Aviator.

War Service: Enlisted private; promoted to Sergeant; promoted to M. S. E.; sent as Cadet to S. M. A., Austin, Tex., Nov. 1, 1917; graduated flying, Kelly Field, Tex.; promoted to 2nd Lieut.; Staff Flying Instr., West Point; map making tour Ala., Miss.

Member: Santa Barbara Club; Omaha Athletic Club; Overseas Club.

Present Occupation: Working on aircraft stabilizing invention; operating large cattle ranch, Nebr.

Address: Brownlee, Cherry County, Nebr.



Harrison W. Flickinger

R. R. Fetterhoff

FETTERHOFF, R. R., Aerial Photography; born, North Baltimore, Ohio, July 3, 1892; son of Emmett C. Fetterhoff and Emma B. Fetterhoff.

Education: Tri-State College.

Professional: Teacher from 1910 to 1913; District and General Manager, Life Insurance Agency, 1913-1917; U. S. Army, 1917 to 1919.

Aeronautical Activities: 1st Lt., O.T.C., Ft. Benj. Harrison May 1917; Columbus Ground School, 1917; Cadet at Wilbur Wright Field, 1917; Commissioned 1st Lieut., A.S., Jan. 8, 1918, O.T.C., Dual Stage and later testing Thomas-Morse scouts, Gerstner Field; flying training at Gerstner, Hazelhurst and Ellington Fields; transferred to Hazelhurst Field, March 1918; transferred to Luke Field, Honolulu, H. T., May 1918 and assigned as Personnel Adjutant; Ellington Field, Aug. 1918; after discharged from Army, organized the Aerograph Co., which conducts an aerial photographic business and supplies demand for mosaic maps and obliques of real estate allotments, factories, private estates, etc.

Flying Rating: Reserve Military Aviator, Jan. 1918.

War Service: May 1917 to Sept. 1919.

Member: Cleveland Aviation Club.

Present Occupation: President, The Aerograph Co.

Address: 701 Fidelity Mortgage Bldg., Cleveland, Ohio.

Jacob Earl Fickel

FICKEL, JACOB EARL, Major, Air Service; born, Des Moines, Iowa, Jan. 31, 1883; son of Joel Fickel and Maria M. (Jackson) Fickel; married, Marian Allison, Feb. 15, 1912.

Education: Public schools, Des Moines, Iowa; Des Moines College; U. S. Revenue Cutter Service; Cadet School.

Professional: Cadet, U. S. Revenue Cutter Service, Aug. 4, 1902 to Jan. 31, 1904; Private, Corporal, Sergeant, 1st. Sergeant, Company K, 27th Infantry, March 10, 1904 to Feb. 28, 1907; 2nd. Lieut., 29th Infantry, Feb. 11, 1907; 1st Lieut., 29th Infantry, June 1, 1911; Capt., 31st Infantry, July 1, 1916; Lt. Col., Air Service, Aug. 20, 1918; Major, A.S.S., July 1, 1920.

Aeronautical Activities: Performed first experiments in aerial gunnery in history, Aug. 1910,

with Glenn Curtiss and Chas. Willard; Graduate, Rockwell Pursuit School, Oct. 18, 1918.

Flying Rating: Junior Military Aviator, Sept. 2, 1918; Airplane Pilot.

Member: Army and Navy Club (Wash.).

Present Occupation: Major, Air Service.

Address: Couch Bldg., Portland, Ore.; home, Vancouver Barracks, Vancouver, Wash.

Robert Halbert Finley

FINLEY, ROBERT HALBERT, 1st Lieut., Air Service; born, Omaha, Nebr., Nov. 10, 1892; son of Robert Arnot Finley and May (Halbert) Finley; married, Irene Shepard, Sept. 14, 1914.

Education: Public schools of Omaha, Nebr.; B.S. in Electrical Engineering, Nebraska University.

Professional: Sales Department, Ford Motor Co., Omaha, Nebr., until entered the service in Oct. 1917.

Aeronautical Activities: U. S. Army Balloon School, Ft. Omaha, Nebr., Oct. and Nov. 1917; cadet at ground school, balloons; U. S. Army Balloon School, San Antonio, Tex., Dec. 1917; Instructor U. S. Army Balloon School, Fort Omaha, Jan. 1918 to Feb. 1919; Naval Air Station, Pensacola, Fla., Feb. 1919 to June 1919; Army Air Station, Langley Field, Va., June 1919 to present date; instructor in army airship school, Airship Communications Officer.

Flying Rating: Free Balloon Pilot No. 823, Jan. 30, 1918; Dirigible Balloon Pilot No. 122, Aug. 13, 1919; Aviator's Certificate No. 4797, July 1920; Balloon Observer; Airship Pilot.

War Service: Oct. 1917 to Nov. 1918.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service. **Address:** Langley Field, Va.; home, 2603 Fowler Ave., Omaha, Nebr.

Shepler Ward Fitzgerald

FITZGERALD, SHEPLER WARD, Major, Air Service; born, Burden, Kans., Nov. 11, 1884; son of William T. Fitzgerald and Emma Belle Fitzgerald; married, Adeline Kellogg, Dec. 8, 1915.

Education: Grammar and high schools of Washington, D. C.; LL.B. 1907, George Washington University.

Professional: Asst. Attorney for Cutler Hammer Mfg. Co., Milwaukee, Wis., 1908-1909.

Aeronautical Activities: 1914, flying training in Aviation Section, Signal Corps; flying work continued to date.

Flying Rating: Junior Military Aviator, 1915; Military Aviator, 1918; Airplane Pilot, 1920.

War Service: A. E. F. Dec. 1917, training in England; Jan. to March, 1918 Director 2d Corps Aeronautical School; May 1918, Commanding Officer, 2d Aviation Instruction Center, Tours; June 1918 to Jan. 1919 Army Air Service Commander, 1st Army; Jan. 1919 to April 1919; Asst. Executive, Air Service, Sept. 1919 to Aug. 1920.

Member: Army and Navy Club.

Present Occupation: Commanding Officer, Rockwell Air Intermediate Depot.

Address: Rockwell Field, Coronado, Calif.

William Jay Fitzmaurice

FITZMAURICE, WILLIAM JAY, Major, Air Service; born, Fremont, Ohio, July 26, 1885; son of Michael J. Fitzmaurice and Elizabeth E. Fitzmaurice.

Education: Bucyrus, Ohio High School; 1908, U. S. Military Academy.

Professional: 2nd Lieut., 1st Lieut., and captain of Infantry, Regular Army, 1908-1917; served in Alaska, Panama and United States.

Aeronautical Activities: Primary training Rockwell Field, Calif., Feb. to May 1918.

Flying Rating: Junior Military Aviator, May 31, 1918.

War Service: Major, Air Service, Jan. 1918; Executive Officer (Operations Section), D.M.A. (operations section) Washington, D. C., June to Sept. 1918; General Staff, Nov. 1918 to Feb. 1919.

Present Occupation: Commanding, Montgomery Air Intermediate Depot.

Address: Air Intermediate Depot, Montgomery, Ala.; home, 1600 N. Kingsley Drive, Hollywood, Los Angeles, Calif.

Max Charles Fleischmann

FLEISCHMANN, MAX CHARLES, Capitalist; born, Riverside, Ohio, Feb. 26, 1877; son of Charles Fleischmann and Henrietta (Robertson) Fleischmann; married, Sarah Hamilton Sherlock, Dec. 20, 1906.

Education: Public schools of Cincinnati; Franklin Preparatory School; Ohio Mechanic's Institute.

Professional: 1st Vice President, The Fleischmann Company, and officer in its allied interests.

Flying Rating: Hydro Airplane Pilot No. 48; Balloon Pilot No. 56; Junior Military Aeronaut.

War Service: Overseas 1917 with first Balloon Squadron; Commanding officer, Army Balloon School, A. E. F.; active service as Balloon Observer with 2nd, 4th, and 6th French Armies, and 2nd Balloon Wing, English Army, to study meth-

ods of French Balloon observation, before returning to the United States to install the French methods of balloon training; acted as inspector of training, different balloon schools and later, commanding officer of U. S. Army Balloon School at Aradina.

Member: New York Yacht Club; Santa Barbara Club.

Present Occupation: First Vice President, The Fleischmann Co.; rancher.

Address: The Fleischmann Co., New York City; home, Edgewood Ranch, Santa Barbara, Calif.

Harrison William Flickinger

FLICKINGER, HARRISON WILLIAM, Captain, Air Service; born, Erie, Pa., March 10, 1888; son of William Byron Flickinger and Katherine (Kraft) Flickinger; married, Marguerite D. Weschler, Nov. 4, 1920.

Education: Public schools; S.B., M.E. 1910, Mass. Inst. of Tech.

Professional: 1910-1911, Steel manufacturing; 1911-1916, structural engineer.

Aeronautical Activities: Aeronautical Engineer, 4th Aero Squadron, 1916-1917; commissioned 1st Lieut., Signal Corps, Aviation Section, June 1917; commissioned Regular Army, July 1920, Captain, Air Service.

Flying Rating: Airplane Pilot, Nov. 1917.

Present Occupation: Captain, Air Service.

Address: France Field, Panama Canal Zone; home, 502 N. Grove Ave., Oak Park, Ill.

Benjamin Sturtevant Foss

FOSS, BENJAMIN STURTEVANT, Manufacturer; born, Boston, Mass., Oct. 9, 1886; son of Eugene N. Foss and Lilla (Sturtevant) Foss; married, Dorothy Chapman, Aug. 23, 1911.

Education: Volkman School, Boston, Mass.; A.B. 1908, A.M. 1909, Harvard University.

Professional: Entered employ of B. F. Sturtevant Co., Hyde Park, Boston, Mass. on Jan. 1, 1910.

Aeronautical Activities: Aided in development of Sturtevant Airplane Motor 1910; Organized Sturtevant Aeroplane Co., 1915; Director Manufacturers Aircraft Association from its inception in 1917, to 1919.

War Service: Engaged in industrial work for Sturtevant Aeroplane Co., B. F. Sturtevant Co., and Manufacturers Aircraft Association, throughout the war.

Member: Harvard Clubs, New York and Boston; Engineers Club, San Francisco; M. S. A. E.; various social clubs.

Present Occupation: Treasurer, B. F. Sturtevant Co. and Subsidiaries; Director, Bridgewater Water Co.; Director, Electric Boiler Corp.

Address: Hyde Park, Boston, Mass.; home, Jamaica Plain, Boston, Mass.

Benjamin D. Foulois

FOULOIS, BENJAMIN, D., Major, Air Service; born, Washington, Conn., Dec. 9, 1879; son of Henry Foulois and Sarah A. Foulois.

Education: Public schools of Washington, Conn.

Professional: Corporal and Sergeant, Volunteer Engineers, 1898; Private to 1st Sergeant,

Co. G, 19th Inf., 1899-1901; 2nd Lieutenant to Captain, 1901-1914; Major, Aviation Section, Signal Corps, 1917; Brig. Gen. (Temp.), Air Service, July 1917 to July 1919; Assistant Military Attache, Germany, since May 1920.

Aeronautical Activities: Detailed to aviation duty at its birth in the United States Army in July 1908; with Lieutenants Lahm and Selfridge, operated first Army Dirigible Balloon and first Military Airplane in U. S. Army; Observer with Orville Wright in 1909 on first cross-country flight made by airplane in the United States; three world's records made on this flight; 1910, took first airplane to San Antonio after approximately one hour instruction in flying; Jan. 1910-March 1911, only officer in Army on flying duty; taught himself to fly during this time; designed and successfully used first set of wheels used on Wright airplane in U. S.; 1911, designed first airplane radio sending set ever used on airplane in U. S. Army, 1911, broke world's cross-country record with passenger, flying from Laredo to Eagle Pass, Tex.; 1913, reorganized training system, aviation school, San Diego; 1913, designed first portable field machine shop truck in U. S. Army; 1914, organized, equipped and trained the first Aero Squadron; commanded first Aero Squadron in Mexico during the Mexican Punitive Expedition in 1916; made many flights into Mexico and on one occasion was mobbed and put in penitentiary at Chihuahua City while flying with dispatches from General Pershing to American Consul; 1916, planned establishment at Kelly Field; 1917, technical advisor in preparation of \$640,000,000.00 aviation bill; Chairman, Joint Army and Navy Technical Aircraft Committee of the War and Navy Department; Chairman, Joint Army and Navy Aircraft Committee, Paris Branch; American Member of the Inter-Allied Aviation Expert Committee of the Supreme War Council; Chief of Air Service, A.E.F., Nov. 1917 to May 1918; Chief of Air Service, 1st Army, May 1918 to July 1918; Relieved as Chief of Air Service, 1st Army at his own request, and assigned to duty as Assistant Chief of Air Service, Zone of Advance, July 1918 to Oct. 1918; Assistant Chief of Air Service (Service of Supplies) Oct. 1918 to June 1919; Member of the Military Allied Committee which drafted the Convention for the Rules and Regulations of International Air Navigation.

Flying Rating: Junior Military Aviator, 1914; Military Aviator, 1917.

War Service: 16 Skirmishes and Engagements in Philippine Insurrections and Moro campaign, 1899-1905; 5 Major Operations in France, 1917-1918.

War Honors: Commander Legion of Honor; Distinguished Service Medal for conspicuous services in organizing A.E.F. Air Service, involving intricate negotiations for the procurement of aircraft material, organization of schools and instruction of personnel; valuable assistance in connection with maintenance of Air Service Squadrons at the front.

Present Occupation: Army Air Service, Assistant Military Attache, Germany.

Address: American Embassy, Berlin, Germany.

Walter Hale Frank

FRANK, WALTER HALE, Major, Air Service; born, New York, April 23, 1886; son of Dr. Albert A. Frank and Agnes (House) Frank; married, Hazel Muriel Smith, June 25, 1913.

Education: Grammar and high schools of Buffalo, N. Y.; U. S. Military Academy, 1910.

Professional: 2nd Lieut., 5th Inf., June 15, 1910; 25th Inf., June 1, 1914; 1st Lieut., Inf., July 1, 1916; Capt., 34th Inf., May 15, 1917; Maj., Signal Corps, Oct. 23, 1917; Maj., Air Service, July 1, 1920.

Aeronautical Activities: Assigned to Air Service, Aug. 20, 1917; Kelly Field to Nov., 20, 1917; Executive Officer and Commanding Officer, Ellington Field, Nov. 1917 to Nov. 1918; Executive Officer, Training Section, Division of Military Aeronautics, Washington, D. C., Nov. 1918 to Feb. 1919; Asst. Administrative Executive, Office Chief of Air Service, Feb. 1919 to Sept. 1919; Member of Advisory Board, Sept. 1919 to Nov. 1919; Air Service Engineering School, Nov. 1919 to Sept. 1920; Executive to Chief of Air Service, Sept. 1920 to date.

Flying Rating: Junior Military Aviator, Aug. 1918; Airplane Pilot, June 1920.

Member: Army and Navy Club.

Present Occupation: Executive, Office Chief of Air Service.

Address: Munitions Bldg.; home, 1801-16th St., N. W., Washington, D. C.

Kenneth G. Fraser

FRASER, KENNETH G., 1st Lieut., Air Service; born, LaSalle, Ill., June 19, 1888; son of Dr. W. H. Fraser and Lydia M. Fraser.

Education: Public and high schools of LaSalle, Ill.; Russ High School of San Diego, Calif.; University of Illinois.

Professional: U. S. Reclamation Service; Antelope Valley Irrigation Co.

Aeronautical Activities: M.S.E., Rockwell Field; School of Military Aeronautics, 18th Squadron, Austin, Texas; flying training and Assistant Officer in Charge of flying, Call Field; in charge, Dual Instruction and Officer in charge of flying, Taylor Field; detailed to Engineering Division,



William F. Fullam

A.S., McCook Field, Dayton, Ohio, Equipment Section; Assistant to Contracting Officer Engineering Division; Chief of Inspection, Engineering Division, to date.

Flying Rating: Reserve Military Aviator, March 1, 1918; Airplane Pilot, July 1, 1920.

War Service: July 5, 1917 to date.

Member: Engineers' Club, Dayton, Ohio.

Present Occupation: Chief of Inspection Eng. Div. A. S.

Address: McCook Field; home, 535 Y.M.C. A., Dayton, Ohio.

Wallis E. Frederick

FREDERICK, WALLIS E., 1st Lieut., Air Service; born, Abbott, Tex., Sept. 20, 1895; son of Archa W. Frederick and Sadie T. Frederick; married, Josie A. Cate, Sept. 1, 1917.

Education: Backy High School, Rocky, Okla.; Southwestern State Normal School, Weatherford, Okla.

Aeronautical Activities: Airplane Pilot, Aug. 1918.

War Service: Army, Aug. 3, 1917 to Oct. 27, 1919.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.; home, Weatherford, Okla.

William Freeland Fullam

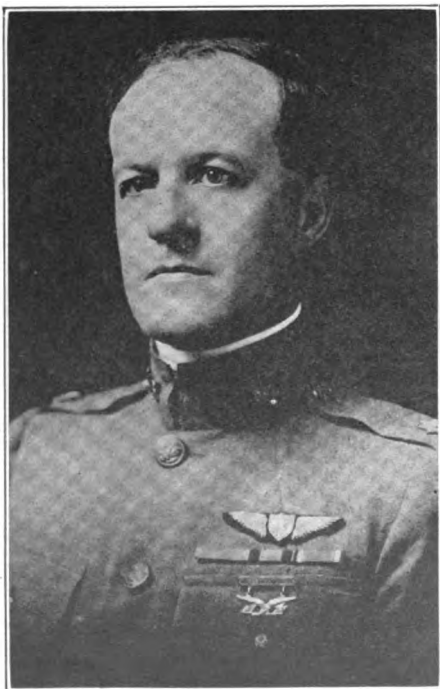
FULLAM, WILLIAM FREELAND, Rear Admiral, Retired; born, Pittsford, N. Y., Oct. 20, 1855; son of Nathan Seymour Fullam and Rhoda A. (Stowits) Fullam; married, Mariana W. Robinson, April 15, 1885.

Education: Rochester High School; De Graffs Military School; U. S. Naval Academy, 1873.

Professional: Mediterranean Cruise, U. S. S. Marion and U. S. S. Trenton, 1877-1879; Final Graduation, Naval Academy, 1879; China Cruise, U. S. S. Swatara, 1879-1882; Dept. Applied Mathematics and Mechanics, and in charge battalion of Midshipmen, Naval Academy, 1883-1887; cruise in U. S. S. Boston, Yorktown, Vesuvius and Trenton, 1887-1891; Dept. Applied Mathematics and Mechanics, and in charge battalion of Midshipmen, 1891-1894; on board U. S. S. Raleigh and Miantonomoh and in Dept. Ordnance, Naval Academy, 1894-1897; U. S. S. New Orleans, 1898; Exec. Off. U. S. S. Lancaster, 1899-1901; Head Dept. Ordnance, 1902-1905; commanded U. S. S. Marietta, 1906-1907; Commandant Naval Training Station, Newport, R. I., 1907-1909; commanded U. S. Battleship Mississippi, 1909-1911; Commandant, Naval Training Station, Great Lakes, Ill., 1911-1912; Aide to Sec. of Navy, 1913; Superintendent, Naval Academy, 1914-1915; Commander-in-chief, Pacific Reserve Fleet, Oct. 1915; Commander, Reserve Force, Pacific Fleet, 1916.

Aeronautical Activities: Has written many articles emphasizing the use of aircraft in a "Three-Plane Navy".

War Service: Commander, Patrol Force, Pacific Fleet and later as Commander, Division 2, Pacific Fleet; upon the departure of Commander



Benjamin D. Foulois

in-chief, remained as senior officer present in the Pacific, cooperating with the British and Japanese forces; in charge of all Naval Districts in the Pacific, in order to secure better coordination with the Army in all defensive measures.

Books: Hand Book of Infantry and Artillery, Petty Officer's Drill Book, Recruits' Handy Book, Text Book of Ordnance and Gunnery for Naval Academy (Fullam & Hart), Navy Drill Books (Senior Officer of Board), numerous articles on Air Power.

Member: New York Yacht Club, Naval Academy Club, Army and Navy Club.

Present Occupation: Rear Admiral, retired.
Address: Army and Navy Club, Washington, D. C.

Ernest J. Fuller

FULLER, ERNEST J., Lieut., U.S.N.R.F.; born, Brooklyn, N. Y., Aug. 8, 1885; son of James Mann Fuller and Agnes (Johnson) Fuller; married, Inez H. Sanborn, Sept. 21, 1918.

Educated: 1903, Polytechnic Preparatory School, Brooklyn, N. Y.; 1908, Union College.

Professional: 1908-1914, The American News Co. as executive; 1914-1917, manufacturing business.

Aeronautical Activities: Ground School Course, Naval Aviation Detachment, M.I.T., 1917; preliminary and final training as Naval Aviator, 1918-1921; stationed at Bay Shore, L. I., Brunswick, Ga., Miami, Fla., Navy Department, Washington, D. C., U.S.S. Langley, Norfolk, Va.

Flying Rating: Naval Aviator No. 2689, Sept. 1919.

War Service: As above.

Present Occupation: U. S. Navy; duty in C.F.O., U.S.S. Langley.
Address: Navy Yard, Norfolk, Va.; home, Warwick, N. Y.

Garland Fulton

FULTON, GARLAND, Lt. Commander, U.S.N.; born, University, Miss., May 6, 1890; son of Robert Burwell Fulton and Annie (Garland) Fulton; married, Gertrude Russell Langdon, July 22, 1918.

Educated: Public and private schools in Miss. and Va.; entered U. S. Naval Academy 1912; 1916, M.S. in Naval Architecture, Mass. Inst. Technology.

Professional: Served on various ships and at various Navy Yards; actively engaged on aeronautical work since 1918.

Navy Service: Commissioned Ass't Naval Constructor, Rank, Lieut. (J. G.) 1915; promotion in due course to present Rank of Lieut. Commander.

Aeronautical Activities: Brief Course in Aeronautics 1915-1916 at M.I.T., in connection with Naval Constructors' course in Naval Architecture; on Aeronautical duty in Bureau of Construction and Repair, Navy Department.

Member: American Society Naval Architects; Army and Navy Club.

Present Occupation: On Aeronautical duty in Bureau of Construction and Repair, Navy Department, Washington, D. C.

Address: Navy Department, Washington, D. C.

Dale Vincent Gaffney

GAFFNEY, DALE VINCENT, 1st Lieut., Air Service; born, Methuen, Mass., Feb. 18, 1894; son of John D. Gaffney and Edith H. Gaffney; married, Grace Mande Blanchard.

Educated: Public and high schools.

Aeronautical Activities: Primary training, April 1918 to June 1918; advanced training, July 1918 to June 1919; border duty, Mexican Border, July 1919 to May 1921.

Flying Rating: Reserve Military Aviator; Airplane Pilot, July 1918.

Present Occupation: 1st Lieut., Air Service.
Address: Ft. Bliss, Tex.

Edmund Pendleton Gaines

GAINES, EDMUND PENDLETON, Student, born, Bradley, S. C., Feb. 15, 1896; son of William Joseph Gaines and Anna Maria Gaines.

Educated: Edgfield public schools, Edgfield, S. C.; B. S. 1921, University of South Carolina.

Aeronautical Activities: Cadet at Wright Field; 1st Lieut., Fort Sill; Aerial Gunnery Instructor, Fort Worth; Senior Flight Commander, 186th Aero Squadron in France and Germany, 1918-1919.

Flying Rating: Reserve Military Aviator.

Member: Aero Club of America.
Present Occupation: Student.
Address: University of South Carolina; home 821 High Street, Columbia, S. C.

Edson Fessenden Gallaudet

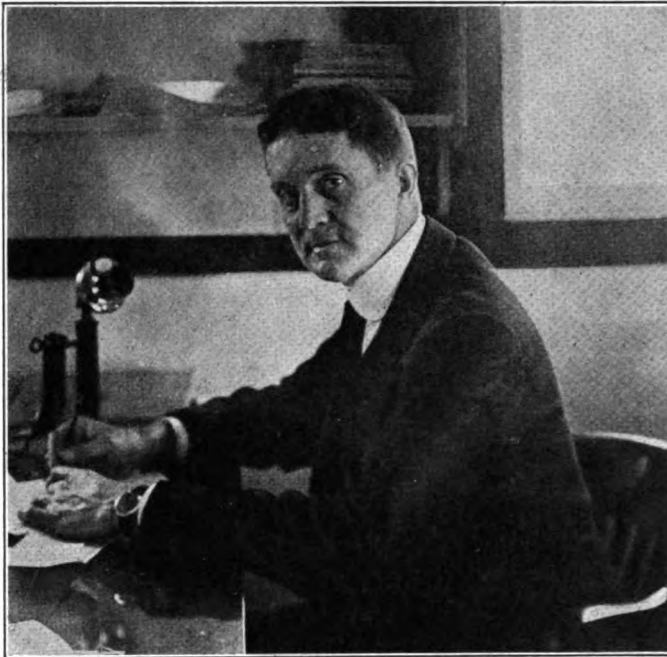
GALLAUDET, EDSON FESSENDEN, Aeronautical Engineer; born, Washington, D. C., April 21, 1871; son of Edward Miner Gallaudet and Susan (Denison) Gallaudet; married, Marion Cockrell, Feb. 14, 1903.

Educated: Hartford public High School; Bach. Arts, 1893, Yale University; 1896, Ph. D. John Hopkins University.

Professional: Westinghouse Electric Co., 1896-1897; Instructor in Physics, Yale University 1897-1900; Cramps Shipbuilding Co., Philadelphia, 1900-1903; Platt Iron Works Co., Dayton, O., 1903-1908.

Aeronautical Activities: Started Gallaudet Aircraft Co. in 1910; Secured American Pilot's license with Wright Biplane, July 1911; Secured French pilot's license with Nieuport Monoplane, Nov. 1911.

Member: S. A. E., Providence Eng. Soc.; En-



Edson F. Gallaudet

gineers Club; Aero Club of America; Agawam Hunt Club, Providence.

Present Occupation: Chairman of Board and Chief Engineer, Gallaudet Aircraft Co.

Address: Gallaudet Aircraft Co., East Greenwich, R. I.; home, 152 George St., Providence, R. I.

James J. Gambs

GAMBS, JAMES J., Investment Banker; born, Cincinnati, Ohio, Aug. 16, 1895; son of Jacob Martin Gambs and Anna Gambs.

Educated: High schools; A.B., University of Cincinnati.

Professional: Investment banking since 1913.

Aeronautical Activities: Commander, 361st Aero Squadron, 1917-1918; Adjutant, First Aero Wing, 1918.

Flying Rating: Reserve Military Aviator.

War Service: Army, May 1917 to Nov. 1918; 1st Lieut., A.S.S.C.

Present Occupation: Investment banking.

Address: 5824 Saranac Ave., Cincinnati, Ohio.

John R. Gammeter

GAMMETER, JOHN R., Process Engineer; born, Akron, Ohio, Mar. 27, 1876; son of Christian Gammeter and Anna Gammeter; married, Susie Garman, Dec. 18, 1898.

Educated: Public Schools.

Professional: Rubber business, 25 years.

Aeronautical Activities: Founded aerial school at Silver Lake Park, 1910; operated three Curtiss and one Bleriot and one Demoiselle airplane; conducted exhibitions; purchased control, 1912; designed and built airplane, 1914; 1917-1919, in charge aeronautical work, B. F. Goodrich Co.; built with Henri Juilliot first 90,000 cu. ft. dirigible balloon in 1917; built other dirigibles and kite balloons for government; planned one man dirigible of 35,000 cu. ft.; invented Gammeter Balloon Gas Valve and numerous accessories.

Present Occupation: Process Engineer; B. F. Goodrich Co.

Address: B. F. Goodrich Co., Akron, Ohio; home, North Portage Path, Akron, Ohio.

Don Gardner

GARDNER, DON, Merchandise Business; born, Syracuse, Nebr., May 25, 1896; son of Edward V. Gardner and Dora (Andrus) Gardner.

Educated: Grade schools in Colorado and Kansas; Pittsburg, Kans. High School, 1913; University of Kansas, 1916-1918.

Professional: Civil Engineering two years; retail automobile and accessory business.

Aeronautical Activities: Attended school for aerial observers, 1919; commissioned 2nd Lieut. Oct. 14, 1918.

Flying Rating: Airplane Observer.

War Service: 1st O. T. Camp, Ft. Riley, Kans., 1917; S. M. A., Urbana, Ill., 1918; discharged, Jan. 14, 1919.

Present Occupation: Wholesale Grocery, Winfield Wholesale Grocery Co.

Address: 6th and Main Sts.; home, 608 E. 11th St., Winfield, Kans.

Lester Durand Gardner

GARDNER, LESTER DURAND, Publisher; born, New York, August 7, 1876; son of Harry Gardner and Frances (Scott) Gardner; married, Margaret Kettle of New York, 1913.

Educated: Detroit public schools; B.S. Massachusetts Institute of Technology 1898; Columbia University, 1900; member of the Corporation of the Massachusetts Institute of Technology 1922-1927.

Professional: On Staff of Chicago Journal, New York Sun, New York Mail, Everybody's Magazine and Collier's Weekly, 1898-1911; Director, The Mentor Association, 1911-15; President, The Gardner, Moffat Co., Inc., 1916 to date; publisher and editor of Aviation, The Rubber Age and Tire Trade Journal and Who's Who in American Aeronautics.

Aeronautical Activities: Publisher and editor Aviation.

Flying Rating: On "flying status" and taking flying training when discharged from army.

War Service: In 1915, private, First Training Regiment, Plattsburg, N. Y.; Commissioned first lieutenant, Signal Officers' Reserve Corps, August 1917; Captain, Regular Army, Aviation Section, Signal Corps and on active duty, September, 1917; Served for one year organizing Air Service squadrons at Kelly Field, Texas; 1918, commanding officer Aviation Camp, Waco, Tex.; Major, Air Service (Aeronautics) September 17, 1918; on duty Board of Control, Department of Military Aeronautics when discharged, December 13, 1918.

Member: Society of Automotive Engineers; Associate, American Society of Mechanical Engineers; Aero Club of America; University Club (New York); University Club (Washington); Army and Navy Club (Washington); Technology Club; Columbia University Club; Sons of American Revolution.

Address: 225 Fourth Ave.; home, 100 Morning-side Drive, New York.

William H. Garrison

GARRISON, WILLIAM H., Major, Air Service; born, Brooklyn, N. Y., Jan. 29, 1885; son of William H. Garrison, Sr. and Mary (Tucker) Garrison; married, Myrtle Jeannette Mackin, Aug. 17, 1917.

Educated: Brooklyn Preparatory Polytechnic and Erasmus Hall High School; La Villa, Ouchy, Lausanne, Switzerland; U. S. Military Academy.

Professional: Army Officer.

Aeronautical Activities: Training and flying duty at the following fields: Brooks, Ellington, Gerstner, Souther, Park, Payne, Taylor, Dorr, Carlstrom, Bolling, Hazelhurst, Langley, Wilbur Wright, Eberts, Love, Post, Call, Carruthers, Kelly, Mather, and March; Rockwell Field.

Flying Rating: Junior Military Aviator; Airplane Pilot.

War Service: April 17, 1917 to Jan. 1919.

Member: Army and Navy Club, Manila, P. I.; Army and Navy Club (Wash.).

Present Occupation: Commanding Officer, San Antonio Air Intermediate Depot.

Address: San Antonio Air Intermediate Depot, San Antonio, Tex.

Harold Geiger

GEIGER, HAROLD, Major, Air Service; born, Plainfield, N. J., Oct. 7, 1884; son of Fred C. Geiger and Josephine D. Geiger; married, Frances M. Bridges, Sept. 15, 1914.

Educated: High school, East Orange, N. J.; U. S. Military Academy.

Professional: Commissioned officer, U. S. Army. **Aeronautical Activities:** Attached to Signal Corps, U. S. Army for Aviation duty, April 1912; preliminary training at College Park, Maryland and at Hammondsport, N. Y. (Curtiss School); duty at College Park and at North Island, San Diego, 1912 and 1913; at Honolulu, H. T., 1913 and 1914; at San Diego, 1915; relieved from aviation duty 1915; ordered to U. S. Army Balloon School, April 1917; completed course for Balloon Observer, same year; served in Office Chief Signal Officer (Flying Division) and office Director Military Aeronautics, Dec. 1917 to Aug. 1918; overseas, Aug. 1918 to July 1919; served overseas with Balloon Section Hqts. S. O. S., A. E. F., Hqts. 1st Army, A. E. F., Hqts. 5th Corps, 1st Army, A. E. F.; after Armistice, placed on research and investigation work in connection with dirigibles, England, Italy, and France; completed course of instruction (dirigible) at Centre Ecole D'Aeronautic, Rochefort, France and completed partial course of instruction at the Italian Airship School, Champino, Rome, Italy; served in Office Director Military Aeronautics, Aug. 1919 to March 1920; command the Army Balloon School, Ross Field, Calif., March 1920 to March 1921; Assistant Military Attache (Aviation), the Hague, Netherlands, to date.

Flying Rating: Certificate, Military Aviator (Signal Corps); Junior Military Aviator; Junior Military Aeronaut; Balloon Observer; Brevet (France) Pilote de Dirigeable.

Member: Aero Club of America.

Present Occupation: Military Attache (Aviation), Netherlands.
Address: The American Legation, The Hague, Netherlands.

Roy Stanley Geiger

GEIGER, ROY STANLEY, Major, Marine Corps; born, Middleburg, Fla., Jan. 25, 1885; son of Marion F. Geiger and Josephine (Prevatte) Geiger; married, Ennice Renshaw Thompson, July 12, 1917.

Educated: Florida State Normal; LL.B. 1907; Stetson University; University of Chicago.

Professional: Admitted to the Bar, Circuit and Supreme Courts, State of Florida and United States District Court, 1907; commissioned 2nd Lieut. in the Marine Corps, 1909; served at sea, Panama, Nicaragua, Philippine Islands, China, and assigned to aviation duties, 1916.

Aeronautical Activities: Aeronautical instruction, Naval Air Station, Pensacola, Fla., 1916-1917; St. Louis Free Balloon School, 1917; Army Balloon School, Ft. Omaha, Nebr.; in command of Marine Flying Field, Miami, Fla., 1918.

Flying Rating: Naval Aviator; Freed Balloon Pilot (Aero Club License).

War Service: Commanded Squadron No. 7, Marine Corps, Northern Bombing Group, France, 1918; attached to British Squadron No. 217; commanded Fourth Air Squadron, Port au Prince, Republic of Haiti, 1919-1920.

War Honors: Navy Cross.

Member: Army and Navy Club (Wash.); Aero Club of America.



Roy S. Geiger

Present Occupation: Commanding Marine Flying Field, Marine Barracks, Quantico, Va.
Address: Marine Flying Field, Marine Barracks, Quantico, Va.

John Harlin Geisse

GEISSE, JOHN HARLIN, Exp. Engineer; born, Fond du Lac, Wis., July 17, 1892; son of Charles F. Geisse and Jennie (Harlin) Geisse; married, Esther Wattowa, Nov. 8, 1919.

Educated: Public schools of Fond du Lac; B.S. in Mechanical Engineering 1917, University of Wisconsin; Aeronautical Engineering, Mass. Inst. of Tech.

Professional: Member, State Board Engineers, 1916-1917; 1919-1920, Assistant Chief, Power Plant Section, Engineering Division, Air Service; Sept. 1920 to date, Exp. Eng. Wright Aeronautical Corp.

Aeronautical Activities: Aug. 1917, Cadet, Air Service; training at Champaign, Ill., Rantoul, Ill., Ellington Field.

Flying Rating: Reserve Military Aviator.
Member: American Society of Mechanical Engineers.

Present Occupation: Exp. Engineer, Wright Aeronautical Corp.

Address: 238 Lewis St.; home, 247-18th Ave., Paterson, N. J.

Harold Lee George

GEORGE, HAROLD LEE, 1st Lieut., Air Service; born, Somerville, Mass., July 19, 1893; son of Horace George and Susan E. George; married, Anna Virginia Helms, Aug. 10, 1917.

Educated: Public schools of Somerville, Mass. also high school; LL.B., National University, School of Law.

Professional: Secretary to Mr. Justice McReynolds, United States Supreme Court; Secretary to the Federal Reserve Bank, Currency, Hon. John Skelton.

Aeronautical Activities: Graduated from Princeton University, School of Engineering, 1917; elementary flying training, Love Field; commissioned 2nd Lieut., March 28, 1918; took course as Bombardier, Post Field; took course as Bombing Pilot at Châlons-Ferrand, France.

Flying Rating: Airplane Pilot.

War Service: France, Aug. 1918 to March 1919.

Present Occupation: 1st Lieut., Air Service.
Address: Aberdeen Proving Ground, Aberdeen, Md.

Valentine Gephart

GEPHART, VALENTINE, Aeronautical Engineer; born, Denver, Colo., March 8, 1896; son of George W. Gephart and Edna V. Gephart.

Educated: Public schools of Denver, Colo.

Professional: 1915-1916, Harris Oil Co., Denver, Colo.; returned from army 1919 and opened up Aero Repair Depot, Kansas City, Mo.; later incorporated as Valentine Gephart Inc. for purpose of designing and building aircraft.

Aeronautical Activities: Worked on old type Mathewson Biplane in Denver, 1913, with Mr. Horn of Horn Speed Propeller Co.; Air Service School, Beccourt, France, and assigned to 2nd A. I. C.

War Service: March 1917 to March 1919.
Member: Aero Club of America; Kansas City Automobile Club.

Present Occupation: Designer of aircraft; Vice President and General Manager, International Aircraft Co.

Address: 119 Brush Creek Blvd.; home, 3783 Washington St., Kansas City, Mo.

Adlai Howard Gilkeson

GILKESON, ADLAI HOWARD, Major, U. S. Army; born, Lansdale, Pa., Jan. 25, 1893; son of Andrew Gilkeson and Jane (O'Neal) Gilkeson.

Educated: Public and High Schools, Sellersville, Pa.; U. S. Military Academy, West Point, N. Y.

Professional: Army Officer.

Aeronautical Activities: Entered Aviation Section, Signal Corps, Aug. 1916; held second place, New York-Toronto Air Race, 1919.

Flying Rating: Junior Military Aviator.

War Service: Princeton Ground School Commanding Officer, July to Sept. 1917; duty at Chanute Field, Ill., Sept. 1917 to Jan. 1918; Rich Field, Texas, Jan. to April 1918; Wilbur Wright Field, O., April to Aug. 1918; Chanute Field, Aug. 1918 to Jan. 1919.

Present Occupation: Executive Officer, Carlstrom Field, Arcadia, Fla.

Address: Sellersville, Pa.

Harrison Williams Gill

GILL, HARRISON WILLIAMS, Architect; born, Hannibal, Mo., Aug. 23, 1897; son of Everett Gill, Th.D., D.D. and Emma Geraldine (Williams) Gill.



William E. Gillmore

Educated: Deutsche Schule of Rome, Italy; private tutors; A.B. 1917, William Jewell College, Liberty, Mo.; 1919-1921, School of Architecture, Columbia University.

Professional: Architectural Draftsman with Wight & Wight, Kansas City, Mo., 1915-1917; with Wilder and White, New York City, 1919-1920.

Aeronautical Activities: Ground School, Toronto University, 1917-1918; Tullaferry Field, Canadian Airdromes, British Airdromes, France and Belgium, Feb. 1918 to Feb. 1919; passenger carrying, 1919.

Flying Rating: Flight Lieutenant; Scout Pilot; Royal Aero Club certificate No. 6813.

War Service: Royal Air Force, Nov. 1917; commissioned June 1918; discharged June 1919.

Member: Services Club, Stratford Place, London, England; American Legion; Delta Upsilon.

Present Occupation: Junior Architect, Wilder & White.
Address: 50 Church St.; home, 558 West 113 St., New York City.

William E. Gillmore

GILLMORE, WILLIAM E., Lt. Col., Air Service; born, Lorain, Ohio; son of Quartus Gillmore and Mary J. (Fitzgerald) Gillmore; married, Florence Edgeton Nelson.

Educated: Public Schools, Lorain, Ohio; U. S. Military Academy, West Point, N. Y.

Professional: All grades of U. S. Army from 2nd Lt. to Colonel.

Aeronautical Activities: Served in Air Service as Executive Officer, Personnel Division; Chief, Personnel Division; Chief, Planning Division; Executive Officer, Air Service; President of Control Board; Commanding Officer of Kelly Field, San Antonio, Texas; Chief, Supply Group, Air Service.

Flying Rating: Airplane Pilot.
Present Occupation: Chief of Supply Group, Air Service.

Member: Army and Navy Club (Wash.); Aero Club of America, New York, N. Y.; Columbia Country Club (Wash.); American Legion.

Address: c/o Air Service, Munitions Bldg., Washington, D. C.; home, 8753 Northhampton St., N. W., Chevy Chase, D. C.

Guy Gilpatric

GILPATRIC, GUY, Advertising; born, New York, Jan. 21, 1896; son of John Guy Gilpatric and May Gilpatric; married, Louise Lesser, March 27, 1920.

Educated: Columbia Grammar School, New York.

Professional: Aviation, 1912-1917; Advertising, 1917; Army, 1917-1919; Advertising, 1919 to date.

Aeronautical Activities: Instructor, Sloane Aeroplane Co., 1912-1915; Instructor and Tester, Canadian Curtiss Co., Standard Aero Corp., Heinrich Aeroplane Co., later established American Altitude Record with passenger, at Dominguez, Calif., Nov. 28, 1912, on 60 hp. Deperdussin Monoplane; did considerable flying for private individuals and small concerns, exhibitions, etc.; assisted in the design of several successful planes.

Flying Rating: American Pilots' License No. 171, Aero Club of America.

War Service: 1st Lieut., Engineer Officer, 1st man Carns, Leventritt and Goetz, 128 Broadway, Aero Squadron, A. E. F., Aug. 18, 1917 to Oct. 1918; promoted to Capt., 1918; discharged, Jan. 1919.

Present Occupation: Advertising.
Address: 6 East 39th St.; home, 528 West 111 St., New York City.

Robert Glendinning

GLENDINNING, ROBERT, Banker; born, Philadelphia, Pa., Aug. 10, 1867; son of Robert Glendinning and Ellen E. (Butcher) Glendinning; married, Elizabeth R. F. Carpenter, Sept. 17, 1894.
Educated: Cheltenham Military Academy; A.B., 1888, University of Pennsylvania.
Professional: Banking business, head of firm, Robert Glendinning & Co.

Aeronautical Activities: Balloon pilot, F.A.I. license French brevet No. 301, dated April 28, 1913; Hydroaeroplane pilot, F.A.I. license American certificate No. 28, dated July 14, 1915.
War Service: Major and Lt. Col. U. S. Army Air Service from May, 1917, to March, 1919; served St. Mihiel front in France Balloons; C.O. Air Service in Italy from Sept. 1918 to Feb. 1919; nineteen months service overseas.

War Honors: Decorated "Officer Order Crown of Italy".
Member: Philadelphia, Rittenhouse and Racquet Clubs.

Address: 400 Chestnut St., Philadelphia; home, Chestnut Hill, Philadelphia, Pa.

Charles Jasper Glidden

GLIDDEN, CHARLES JASPER, Financier; born, Lowell, Mass., Aug. 29, 1857; son of Nathaniel James Glidden and Laura Ellen (Clark) Glidden; married, Lucy Emma Cleworth, July 10, 1878.

Educated: Public Schools of Lowell, Mass.
Professional: Messenger for the Northern Telegraph Co., Lowell, Mass.; Conducted experiments with Prof. A. Graham Bell in telephone test, Manchester, N. H., to Boston, Mass., 57 miles; built first long distance telephone line in the world, Lowell to Boston, Mass., 1879; built private telephone lines in New England cities, 1877; obtained first telephone subscriber in the world to a telephone exchange; donor of the Glidden Trophy for Automobile Touring; took first car around the world twice; Secretary, Treasurer, and President of several New England and western Telephone Companies; retired from active business, 1899-1917.

Aeronautical Activities: Made 50 balloon ascensions (49 free ascensions, first in 1908), 3 in France, 4 in England, 42 in the United States, 1 in the observation balloon at Fort Omaha.

Flying Rating: International Balloon Pilot, 1908.

War Service: Commissioned First Lieut., Aviation Section, Signal Officers' Reserve Corps, June 12, 1917; July 5, 1917, Aeronautical Officer, Northeastern Department, Boston, Mass.; Sept. 22, 1917, President, Aviation Examining Board, Ft. Omaha; Feb. 20, 1918, commissioned Captain; Oct. 3, 1919, appointed Major, Aviation Section, Signal Officers' Reserve Corps; Oct. 10, 1919 to June 13, 1920, third tour of the world as Executive Secretary of the Commission which organized the First Aerial Derby Around the World.

Member: Royal Geographical Society; American Geographic Society; Touring Club of France; Algonquin Club (Boston); Massachusetts Constabulary.

Present Occupation: Financier.
Address: Lorraine Hotel, New York, N. Y.

Gerald Goad

GOAD, GERALD, Commercial Aviator; born, Denver, Colo., June 3, 1893; son of Thomas W. Goad and Helen M. Goad.

Educated: Harrow House School, England; Hingham public school; Bellingham College, Wash.

Professional: British War Mission, New York, N. Y., 1915-1917; Inspector and Assistant Purchasing Agent, 1919-1921; President, American Aerial Corp.

Aeronautical Activities: 1917, Royal Flying Corp., Canada, training; 1917-1919, R. F. C. and R.A.F. pilot, England and France, 73rd Squadron; civilian flying, 1920-1921.

Flying Rating: Lieut. Scout Pilot, R.F.C. 1917.

War Service: 1917-1919, R.F.C. and R.A.F.

War Honors: One French Decoration.

Member: British Naval and Military Vet. Assn.

Present Occupation: President, American Aerial Corp.

Address: 136 Federal Street, Boston, Mass.; home, Hingham, Mass.

Norman S. Goetz

GOETZ, NORMAN S., Lawyer; born, New York City, March 7, 1887; son of Samuel Goetz and Julia Goetz.

Educated: Public schools, New York; B. A. 1906, Columbia College; LL. B. 1909, Columbia Law School.

Professional: Practiced law 1909 to date (Except during war); member law firm Riegel-

man Carns, Leventritt and Goetz, 128 Broadway, N. Y.

Aeronautical Activities: Enlisted Private 1st class, Dec. 7, 1917; promoted 2d Lt., March 14, 1918; promoted 1st Lt., Oct. 11, 1918; promoted Capt., Air Service Reserve, April 11, 1919.

War Service: Adjutant, Love Field, Dallas, Tex.

Member: Aero Club of America; Air Service Association.

Present Occupation: Lawyer.
Address: 128 Broadway, New York; home, 105 E. 91st St., New York City.

Lewis Edward Goodier, Jr.

GOODIER, LEWIS EDWARD, Jr., Captain U. S. Army; born, Utica, N. Y., Aug. 5, 1885; son of Lewis Edward Goodier and Estelle (Northrup) Goodier; married Myrtis Mahood Nov. 26, 1919.

Educated: Public schools, Utica, N. Y.; Utica Academy, Utica, N. Y.; Central High School, Washington, D. C.; Bachelor of Science in Engineering Chemistry, 1908; Georgia School of Technology, Atlanta, Ga.

Professional: Entered Coast Artillery Corps, U. S. Army, as 2d Lieut., 1908; Transferred to Signal Corps for Aeronautical duty, Sept. 25, 1912; with Aviation Section until July 1, 1915; retired from active service as result of aero accident, July 1, 1916; returned to active duty, July 11, 1916; returned to inactive duty list, May 20, 1919; returned to active duty, Oct. 28, 1920; Assistant Professor, Military Science and Tactics, Georgia School of Technology.

Aeronautical Activities: Student, aviation officer, Sept. 1912 to Feb. 14, 1913; Instructor, Signal Corp Aviation School, June, 1913, to June, 1914; Commanding Officer, 2d Company, 1st Aero Squadron, June, 1914, to Nov., 1914; Badly injured, accident Nov. 5, 1914; Inspection Section, Aviation Section, July, 1916, to April, 1917.

Flying Rating: Pilot's license, Dec. 25, 1912 (No. 200); Expert's License, Feb. 14, 1913; Military Aviator, Feb. 14, 1913; Junior Military Aviator, Aug. 15, 1914.

War Service: Organized and commanded Chandler Field, Essington, Pa., April, 1917, to Nov., 1917; Gerstner Field, Lake Charles, La., Nov., 1917, to April, 1918; officer in charge operations section, Office Director of Military Aeronautics, Washington, D. C., April, 1918, to Aug. 1918; Inspector, Air Service, S. O. S., France, Oct., 1918, to Dec., 1918; Lt. Col., Oct. 1917.

Member: Army and Navy Club (N. Y.); Army and Navy Club (Wash.).

Present Occupation: Assistant Professor Military Science and Tactics, Georgia School of Technology.

Address: Georgia School of Technology, Atlanta, Ga.; home, 29 Kimball Street, Atlanta, Ga.

Donald R. Goodrich

GOODRICH, DONALD R., 1st Lieut., Air Service; born, Marshall, Mich., Oct. 17, 1894; son of John Goodrich and Mary Dorothy Goodrich.

Educated: Marshall High School.

Professional: Salesman, 1913-1917.

Aeronautical Activities: Ground School, Urbana, Ill., March 1918 to June 1918; flying cadet at Eberts Field, July 25, 1918 to Nov. 8, 1918; student officer at Rockwell Field, Pursuit and Aerial Gunnery School, Nov. 1918 to Feb. 14, 1919; instructor at Rockwell Field, Pursuit and Aerial Gunnery; Mexican Border Patrol Pilot, Sept. 1, 1919 to May 15, 1921; Project B, Langley Field, May 27, 1921 to date.

Flying Rating: Airplane Pilot, 1920.

War Service: Army, March 1918 to date.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.; home, 626-627 Post Bldg., Battle Creek, Mich.

Robert E. M. Goolrick

GOOLRICK, ROBERT E. M., Major, Air Service; born, Fredericksburg, Va., June 9, 1886; son of Judge John T. Goolrick and Mrs. John T. Goolrick.

Educated: Six years in public schools; four years in private schools; three years, Fredericksburg College; four years, Virginia Polytechnic Institute, B.S. in Electrical Engineering, 1907.

Aeronautical Activities: Detailed in Air Service, July 1, 1920; March 1921, Graduated Air Service Pilots School, Carlstrom Field, Fla.; Class 1921, Observation School, Post Field, Fort Sill.

War Service: Command 1st Anti-Aircraft Battalion, A. E. F., Nov. 1917 to Nov. 12, 1918.

War Honors: Croix de Guerre.

Present Occupation: Major, Air Service.

Address: Fredericksburg, Va.

Edgar Staley Gorrell

GORRELL, EDGAR STALEY, Engineer; born, Baltimore, Md., Feb. 3, 1891; son of Charles Edgar Gorrell and Pamela Stevenson (Smith) Gorrell.

Educated: Public schools of Baltimore, Md.;

Baltimore City College; U. S. Military Academy; Mass. Inst. of Tech.; Master of Science in Aeronautical Engineering at M. I. T. in 1917.

Professional: Officer U. S. Army, 1912-1920; Industrial Engineer, Nordyke Marmon Co., Indianapolis, Ind.

Aeronautical Activities: Began flying 1914; flew in California in 1914-1915; San Antonio, Tex., 1916; in American Punitive Expedition in Mexico in 1916; in A. E. F. 1917-1918-1919; Chief of Staff, Air Service, A. E. F.; Aeronautical Engineer.

Flying Rating: Pilot, F. A. I. license in 1915; Junior Military Aviator, 1915; Military Aviator, 1918.

War Honors: Distinguished Service Medal, 1919; British Distinguished Service Order, 1919; French Legion of Honor, 1919.

Books: Army Air Service Publications.

Member: Aero Club of America.

Present Occupation: Industrial Engineer, Nordyke Marmon Co.

Address: Nordyke Marmon Co., Indianapolis, Ind.

Oliver P. Gothlin, Jr.

GOTHLIN, OLIVER P., Jr., 1st Lieut., Air Service; born, Dayton, Ohio, Feb. 14, 1894; son of Oliver P. Gothlin and Carrie Bell Gothlin; married, Sarah Elizabeth McCausland, July 3, 1918.

Educated: Public schools, Dayton, Ohio and Columbus, Ohio; Columbus North High School; Ohio State University, 1913-1915; Case School of Applied Science, 1916-1917.

Aeronautical Activities: Ground School, S.M.A., Champaign, Ill., July 22, 1917 to Sept. 22, 1917; cadet, Scott Field, Sept. 22 to Dec. 31, 1917; Post Field, Camp Jackson, Camp Dick, Godman Field, Langley Field, as pilot.

Flying Rating: Airplane Pilot.

War Service: Signal Corps, May 23, to July 22, 1917.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Edgar Nathaniel Gott

GOTT, EDGAR NATHANIEL, Aeronautical Executive; born, Detroit, Mich., May 2, 1887; son of Edward A. Gott and Stephanie (Ortman) Gott; married, Arline Elizabeth Biggs, June 2, 1914.

Educated: Detroit University School; B. S. 1909, University of Michigan.

Professional: Asst Supt., Griffin Wheel Co., Pullman, Ill., 1909-1911; Resident Engineer, Griffin Wheel Co., Tacoma, Wash., 1911-1915; V. P. and General Mgr. Boeing Airplane Co., 1915 to date.

Member: Aero Club of the Northwest; Seattle University Club; College Club, Seattle.

Present Occupation: Vice President and General Manager, Boeing Airplane Co.

Address: Boeing Airplane Co., Seattle, Wash.; home, 2808 Tenth Ave. North, Seattle, Wash.

Charles Hampson Grant

GRANT, CHARLES HAMPSON, Aeronautical and Civil Engineer; born, Elizabeth, N. J., Nov. 27, 1894; son of David C. Grant and Gertrude H. Grant; married, Lillian May Browne, Aug. 15, 1918.

Educated: Pingry School, Elizabeth, N. J.; Stevens Preparatory School, Hoboken, N. J.; Princeton University; Mass. Inst. of Tech.

Aeronautical Activities: Since 1909 has built flying model airplanes; built and flew a monoplane glider at fifteen years of age, later made numerous flights with larger biplane gliders; worked under Leoning at Sturtevant Plant, Jamaica Plain, Mass.; 1916, at Mineola as mechanic and designer; 1917, Princeton Flying School; 1918, assigned to Technical Section, Air Service, Washington, D. C.; later stationed at McCook Field doing design work; 1919, established a flying model manufactory in Dayton, the first one to turn out flying models on a production basis, as many as 400 per day.

Flying Rating: French Brevet Military Aviator.

Present Occupation: Aeronautical Research and Engineering.

Address: Irving National Bank, Lincoln Office, East 42nd Street, New York City; home, 22 East 10 St., New York City.

Carlye West Graybeal

GRAYBEAL, CARLYE WEST, 1st Lieut., Air Service; born, Columbia Falls, Mont., Aug. 25, 1893; son of Charles Lee Graybeal and Nettie West Graybeal; married, Annette Holroyd, Nov. 9, 1918.

Educated: Public schools; University of Iowa, 1911-1912; O.A.C., 1913-1916.

Flying Rating: Reserve Military Aviator, Nov. 1918; Airplane Pilot, Nov. 1920.

Present Occupation: 1st Lieut., Air Service.

Address: Kelly Field, Tex.

Horace Green

GREEN, HORACE, Editor; born, New York, N. Y., Oct. 13, 1885; son of George Walton Green and Harriet B. (Atwater) Green; married, Eleanor Rodman Townsend, June 4, 1915.

Educated: Cutler's School, N. Y. C.; Groton School, Groton, Mass.; A. B. 1908, Harvard University; Harvard Law School, 1908-1911.

Professional: Reporter in California, 1911; on staff, New York Evening Post, 1911-1915; acquired interest in Boston Journal; Trustee, Atwater Real Estate Trust Co., 1913 to present; at beginning of war in 1914, sent overseas as War Correspondent for Evening Post; with British and Belgian Armies, Sept. 1914 to Jan. 1915; captured and sent to Germany; present at Brussels, Louvain, Ypres, Malines, bombardment and capture of Antwerp; War Correspondent in France and Balkans, Sept. to Jan. 1915.

Aeronautical Activities: First Plattsburg Camp, summer of 1916; commissioned in Air Service when U. S. entered the war; Information Officer with Royal Flying Corps, Toronto, Canada; recalled and on duty, Office of the Director of Air Service in Charge of Information Branch, Ground Schools Section; Chief, Instruction Dept. Radio Branch; ordered overseas, Oct. 1918; commissioned Captain, Air Service Aug. 1918; recalled to Office of Director of Air Service after Armistice; Feb. 1919, issued first number U. S. Air Service Magazine; Oct. 1919, formed Air Service Publishing Co.; commissioned Major ORC March 1920.

Flying Rating: Reserve Military Aviator.

Books: The Log of a Non-Combatant.

Member: University Club, N. Y.; Harvard Club, N. Y.; Aero Club of America; Chevy Chase.

Present Occupation: Associate Editor, 'Leslie's Weekly'.

Address: 645 Munsey Bldg.; home, 1226 16th Street, Washington, D. C.

Paul Edson Green

GREEN, PAUL EDSON, Architect; born, Buffalo, N. Y., May 26, 1892; son of Edward B. Green and Harriet (Edson) Green.

Educated: Nichols School, Buffalo, N. Y.; La-Villa, Switzerland; Milton Academy, Milton, Mass.; A. B. 1914, Cornell University.

Professional: Superintendent, Green & Wicks, Architects; member firm, Edward B. Green & Sons, Architects.

Aeronautical Activities: Cornell Ground School, May-July 1917; Selfridge Field, July-Sept. 1917; A. E. F. Issoudun, Nov. 1917; Clermont-Ferrand, Nov. 1917 to May 1918.

Flying Rating: Pilot and Bombing Observer. *War Service:* Attached French Group Bombardment 5 and 4, March-July 1918; Battle Marne, 1918; Hdqrs. Air Service, Charge Bombardment Training.

War Honors: Croix de Guerre.

Member: Secretary and Director, Aero Club of Buffalo.

Present Occupation: Architect, Edward B. Green & Sons.

Address: 75 Magara St.; home, 230 North St., Buffalo, N. Y.

Harry Westervelt Gregg

GREGG, HARRY WESTERVELT, Lt. Col., Air Service; born, Randolph, Mass., Oct. 8, 1876; son of William Gregg and Lura Anna (King) Gregg; married, Harriet Hahn, Dec. 28, 1907.

Educated: Newark Academy, Newark, N. J., John C. Green School of Science; Princeton University; School of Applied Science; Columbia University.

Professional: Private, Corporal, and Sergeant, 28 U. S. V. I., 1899-1901; served in Regular Army in all grades from 2nd Lieut. to Lt. Col. inclusive since Feb. 2, 1901.

Aeronautical Activities: C. O. Selfridge Field, Mt. Clemens, Mich., Sept. 1917 to April 1918; Chief of Personnel Branch, Aviation Section Signal Corps and Chief of Personnel Division, Department Military Aeronautics to Aug. 1918; C. O. 1st Tr. Brigade, A. G. S. D. and Concentration Camp, Garden City, N. Y., to Nov. 1918; C. O., A. G. S. D. and Concentration Camp to April 1, 1919; Executive Officer, Mitchell Field, N. Y. to July 1919; C. O., A. G. S. D., Detroit, Mich. to Oct. 16, 1919; C. O., A. G. S. D. and Little Rock Air Intermediate Depot, Little Rock, Ark. Nov. 27, 1920 to date.

**Elbert J. Hall**

War Service: Army; Philippine Insurrection, 1899-1901; Puljane Insurrection, Philippine Islands, 1903; World War.

Member: Army and Navy Club (Wash.); Army and Navy Club (Manilla, P. I.); Aero Club of America; American Legion; Veterans of Foreign Wars; Sons of American Revolution.

Present Occupation: Commanding Officer, Little Rock Air Intermediate Depot.

Address: Little Rock, Ark.

Michael Gregor

GREGOR, MICHAEL, Aeronautical Engineer; born, Derbent, Russia, Feb. 6, 1888; son of Levan Gregor and Sopnie Gregor.

Educated: High School, Petrograd, Russia; Institute of Engineers of Ways of Communications, Petrograd, Russia, Engineer 1912.

Professional: Engineer of Ways of Communication, Russian Government, 1912-1914; Engineer of Buildings, Tiflis, Ga., 1918-1920.

Aeronautical Activities: Airplane constructor, Stetin & Co., Petrograd, 1910; chief test pilot, Pischof & Co., Paris, 1911; manager technical section, Stetin & Co., 1914-1915; Consulting Engineer, airplane propeller construction, Petrograd, 1915-1918; Aeronautical Engineer, Galandet Aircraft Corp., 1921 to date.

Flying Rating: Pilote-Aviateur Brevet, France, No. 577.

War Service: Pilote-Officier, Russian Army, 1916-1918.

Member: Aero Club of America; Society of Engineers of Ways of Communication of Russia.

Present Occupation: Structural Engineer, Dayton Wright Co.

Address: 323 West Third Street, Dayton, Ohio.

Carl Henry Grobe

GROBE, CARL HENRY, Naval Aviation Pilot; born, Hoboken, N. J., May 12, 1900; son of Herman George Grobe and Margaret Louise Grobe.

Educated: Public schools of Hoboken, N. J. *Professional:* Professional tennis, 1915-1917.

Aeronautical Activities: 1917-1918, L.W.F. Engineering Co. and Standard Aircraft Co. assembling Navy HS2L seaplanes.

Flying Rating: Naval Aviation Pilot No. 40.

War Service: Naval Aviation, May 1918; instructed in Aviation Mechanics School, Great Lakes, Ill.

Member: Aero Club of America.

Present Occupation: Naval Aviation Pilot, Atlantic Fleet Air Force.

Address: 1317 Washington St., Hoboken, N. J.

Edmund L. Gros

GROS, EDMUND L., Physician; born, Sept. 11, 1869; son of Alfred Gros; married, Honore Patton 1901.

Educated: San Francisco High School; Stanford University, 1892; University of Paris, 1897.

Professional: Physician, American Ambulance Service; Chief Physician, American Field Service; Chief Physician, American Hospital of Paris.

Aeronautical Activities: Founder of Lafayette Escadrille and Flying Corps, 1915; Lieut. Col., U. S. Air Service; Chief Liaison Officer, U. S. A. S.

Honors: Officer, Legion d'Honneur; Croix de Guerre; Certificate of Merit; Officer, San Maurizio (Italy).

Present Occupation: Physician.

Address: 23 Avenue du Bois de Boulogne, Paris, France.

Jack I. Grow

GROW, JACK I., Commercial Aviator; born, Pontiac, Mich., Dec. 6, 1893; son of Kasson L. Grow and Elizabeth Grow; married, Isabel Patrick, July 3, 1916.

Educated: Public schools of Pontiac, Mich. Pontiac High School; Pontiac Business University; Cornell University.

Professional: Instructor, Aeronautics (Civilian).

Aeronautical Activities: Training S. M. A., Cornell University, 1918; training at Carruthers Field; instructor, Barron Field.

War Service: Oct. 1917 to March 1919.

Member: Aero Club of America; Aero Club of Pittsburgh (Chapter Member).

Flying Rating: R.M.A. (Pursuit Pilot).

Present Occupation: General Manager, Irwin Aircraft.

Address: Brunswick Hotel, Irwin, Pa.

Edward Higley Guilford

GUILFORD, EDWARD HIGLEY, 1st Lieut., Air Service; born, Emmetsburg, Iowa, July 31, 1889; son of William E. Guilford and Edith M. Guilford.

Educated: Electrical Engineering, Mass. Inst. of Tech.

Aeronautical Activities: Air Service, U. S. Army from May 1919 to date.

Flying Rating: Airplane Pilot.

War Service: Radio Officer, Signal Corps, Nov. 1917; Communications Officer, Air Service, July 1918; Brigade Communications Officer, Air Service, April 1921.

Member: Aero Club of America; Institute of Radio Engineers.

Present Occupation: Brigade Communications Officer, Air Service, U. S. A.

Address: Langley Field, Va.

Chalmers G. Hall

HALL, CHALMERS G., Colonel, Air Service; born, Wilksboro, N. C., Feb. 8, 1875; son of Philo Chalmers Hall and Elizabeth (Whiting) Hall; married, Margaret Mc Neely, Feb. 16, 1898. *Educated:* Public Schools of Hickory, N. C.; U. S. Military Academy. *Professional:* Twelve years experience on army construction projects.

Aeronautical Activities: Organized four technical regiments for service in Air Service, A. E. F. Oct. '18-July '19; in charge production and maintenance night bombardment Sector Air Service A. E. F. Sept. '18-Feb. '19; Chief, Air Service Procurement, March '19 to date; Chief Air Service Disposal, Sept. '19 to date; Experimental flying as observer only.

War Service: Spanish American War; World War.

Member: Aero Club of America.

Present Occupation: Chief of Air Service Procurement, Office of Director of Air Service.

Address: Munition Bldg.; home, 1514 17th St. N. W., Washington, D. C.

Elbert John Hall

HALL, ELBERT JOHN, Aeronautical Engine designer; born, San Jose, Calif., April 30, 1882; son of William Henry Hall and Mary E. (Henning) Hall; married, Caroline R. Smith, March 11, 1905.

Educated: Oak Grove Grammar School, San Jose, Calif.; California Grammar School, Pas Robles, Calif.; San Jose High School, San Jose, Calif.

Professional: Started in 1899 in San Francisco to repair, design and build, gasoline engines; also doing all kinds of jobbing work in connection with machinery; designed an automobile complete for the Heine-Velox Co. of San Francisco and built several in 1905; designed an automobile for the Sunset Auto Co. in 1907 and formed the Hall-Scott Motor Car Co. in 1910 to manufacture railway motor cars and aviation engines.

Aeronautical Activities: Designed and built 8 cyl. 60 HP aviation engine in 1909, weight, 210 lb. V type used by several aviators successfully; Brought out several four and six cylinder vertical models in next few years; designed and built the A-5 and A-7 engines in 1914-1915, being 6 and 4 cylinder, 125 and 90 HP, respectively large quantities being sold government for military purposes; built A5a and A7a engines, 150 and 100HP, for our government, in 1916-1917; assisted in design and production of Liberty 12 aircraft engine and DH-4, and Bristol planes for Army in 1917-1918; as Lt. Col. Air Service; Head of technical Dept. Air Service, A. E. F. in Oct.-Nov.-Dec. 1918; 1919-1920, building stock aviation engines known as L-6 and L-4, 200 and 125 HP, 6 and 4 cylinder, 5"x7" stroke.

War Service: Major, Signal Corps, Oct. 1917; Lt. Col. Air Service, May 1918; discharged Dec. 1918.

War Honors: Awarded distinguished Service Medal for work on Liberty 12 and LeRhone airplane engines; also for work on DeHaviland 4 airplane production and engineering; handling all technical and engineering and design work for A. E. F., Technical Section, Air Service.

Member: Society Automotive Engineers.

Present Occupation: Vice-President and Factory manager of Hall-Scott Motor Car Co.

Address: 5th and Synder, Berkeley, Calif.; home, 199 Lafayette Ave., Piedmont, Calif.

George Eustace Amyot Hallett

HALLETT, GEORGE EUSTACE AMYOT, Captain Air Service; born, Cheltenham, England, May 9, 1890; son of M. J. Hallett and A. C. Hallett; married, Grace A. Wixom, Sept. 29, 1915.

Educated: California public schools; Correspondence Courses (I. C. S.); Continuous home study.

Professional: Served apprenticeship as Machinist, San Diego, Calif.; Foreman of shop and gas engine expert, 1909-1910; with Curtiss Aero & Motor Corporation 1911-1914 as plane and engine mechanic and later as engineering expert; Traveled through Russia, Germany and France for Curtiss Company in 1911 and 1912.

Aeronautical Activities: American Pilot on Wanamaker-Curtiss Trans-Atlantic Airplane "America" in 1914; Civilian Aeronautical Mechanical Engineer with U. S. Air Service 1916-1918; Major, Air Service 1918-1920; Organized all Air Service Mechanics Schools during War; in charge Power Plant Section of Engineering Division, Air Service 1918 to date; Member National Advisory Committee for Aeronautics, and Army and Navy Aeronautical Board.

Flying Rating: Reserve Military Aviator.

War Service: Commissioned Major, Air Service from Civil Service May 18, 1918; Demoted to rank of Captain, due to lack of age, in Army reorganization July 1920.

Books: "Airplane Motors" (Confidential Signal Corps publication) used during War as text book.

Member: Society of Automotive Engineers; Aero Club of America.

Present Occupation: Chief of Power Plant

Section, Engineering Division, McCook Field. *Address:* McCook Field, Dayton, O.; home, 270 Delaware Ave., Dayton, O.

Edward Buck Hamer

HAMER, EDWARD BUCK, Insurance; born, Marion, S. C., March 6, 1896; son of Philip B. Hamer and Gertrude B. Hamer.

Educated: Graded and high schools of Marion, S. C.; 1916, A. B., Wofford College, Spartanburg, S. C.

Professional: Nov. 1916-May 1917, bookkeeper, Marion National Bank; July 1919-Dec. 1920, ranching in Colorado; Feb. 1, 1921, insurance agent, Hamer & Lewis, Inc., Marion, S. C.

Aeronautical Activities: Oct. 1917-Feb. 1918, Hazelhurst Field; Feb. 1918-Sept. 1918, Kelly Field; Sept. 1918, Brooks Field; Oct. 1918-Dec. 1918, Barron Field.

Flying Rating: Flying Instructor.

War Service: Enlisted, May 14, 1917; commissioned 1st Lt. Air Service, Signal Reserve Corps, Jan. 18, 1918; discharged, Dec. 17, 1918.

Present Occupation: General Insurance.

Address: Marion, S. C.

**George E. A. Hallett****Thomas Foster Hamilton**

HAMILTON, THOMAS FOSTER, Propeller Designer and Manufacturer; born, Seattle, Wash., July 28, 1894; son of Thomas L. Hamilton and Henrietta (Green) Hamilton; married, Ethel I. Hughes.

Educated: Public schools of Seattle, Wash.; Mechanical Engineering High School.

Professional: Manager, Hamilton Aero Mfg. Co., 1908-1915; President, Hamilton Aero Mfg. Co. Ltd., Vancouver, Canada, 1915-1917; Inspector, Aeromarine Plane and Motor Co., 1917; Manager, Aircraft Department, West Woodworking Co., 1917; General Manager, Aircraft Department, Matthews Bros. Mfg. Co., Milwaukee, 1917-1919; President, Hamilton Aero Mfg. Co. Inc., 1919 to date.

Aeronautical Activities: Designed, built and flew gliders, airplanes, and propellers since 1908; built and assisted Navy Officers in design of satisfactory propellers of double two blade type for HS2L and two blade type for F5L and NC Flying Boats; specialized in propeller development since 1910; patented metal tipping for weather resisting propellers (used by Air Mail Service).

War Service: In charge aviation school training officers for R.F.C. and R.N.A.S. at Vancouver, Canada, 1915-1917.

Member: Vice President, Aero Club of Wisconsin.

Present Occupation: President, Hamilton Aero Mfg. Co.

Address: P. O. Station D., Milwaukee, Wis.

W. L. Hamilton

HAMILTON, W. L., Commercial Aviator; born, Westville, N. Y., June 1, 1896; son of S. C. Hamilton and Mary B. Hamilton.

Educated: Oneonta High School; Oneonta Normal School; 1920, Columbia University.

Professional: Thomas-Morse Aircraft Corp.; Sales Manager, Aerial Photographer, Fairchild Aerial Camera Corp.

Aeronautical Activities: 1917-1919, Thomas-Morse Aircraft Corp., Test and Approval Field, Mechanical and Flight Tests; 1920-1922, Fairchild Aerial Camera Corp.

Present Occupation: Sales Manager, Fairchild Aerial Camera Corp.

Address: 136 West 52 St.; home, 424 Central Park West, New York City.

Winfield Scott Hamlin

HAMLIN, WINFIELD SCOTT, 1st Lieut., Air Service; born, Dillsboro, Ind., Sept. 1, 1885; son of Walter S. Hamlin and Minerva C. Hamlin; married, Maude Louise Enright, Sept. 10, 1908.

Educated: High school and private colleges.

Professional: Lawyer.

Aeronautical Activities: Training and special work in aerial mapping; Western coast defenses; A. E. F. in Germany.

Flying Rating: Reserve Military Aviator, May 1919; Airplane Pilot, Jan. 1920.

War Service: Enlisted, Sept. 13, 1917; 2nd Lieut., June 1918; 1st Lieut., July 1920 to date.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Charles Herrick Hammond

HAMMOND, CHARLES HERRICK, Architect; born, Crown Point, N. Y., Aug. 8, 1882; son of Charles Lyman Hammond and Mary Electa (Stevens) Hammond; married, Marion Eugenia Rogers, Oct. 4, 1911.

Educated: Chicago Grammar School; Hyde Park High School; Chicago Manual Training School; B.S. in Architecture, Armour Institute of Technology.

Professional: Practical Architecture in Illinois since 1907.

Aeronautical Activities: Started training in Aug. 1918 at Bolling Field; completed training at Carruthers Field, Jan. 1919.

Flying Rating: Reserve Military Aviator.

War Service: Commissioned Captain, Nov. 1917, Aviation Section, S.O.R.C.; commissioned Major, A.S.A., Oct. 1918; commissioned Major, Aviation Section, S.O.R.C., April 1919.

Member: American Institute of Architects; University Club; South Shore Country Club; Chicago Association of Commerce; Illinois Society of Architects.

Present Occupation: Architect.

Address: 64 E. Van Buren St.; home, 1885 East 52nd St., Chicago, Ill.

James W. Hammond

HAMMOND, JAMES W., 1st Lieut., Air Service; born, Ford City, Pa., Oct. 27, 1898; son of Edward E. Hammond and Olive L. Hammond; married, Ruth V. Adams, March 30, 1920.

Educated: Ford City grade and high schools; Grove City College; D.D.S. 1915, University of Pittsburgh.

Professional: Dentist, 1915-1917.

Aeronautical Activities: Training at various schools and camps; instructor of cross country flying at Taylor Field and Love Field; course in aerial photography at Langley Field; Officer in charge of Production, 1st Provisional Photo Detachment, 1st Prov. Air Brigade.

Flying Rating: Reserve Military Aviator, Oct. 1918; Airplane Pilot, Feb. 5, 1921.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.; home, Ford City, Pa.

William S. Hance, Jr.

HANCE, WILLIAM S., Jr., Publishing Business; born, Baltimore, Md., Feb. 27, 1896; son of William S. Hance, Sr. and Viola K. (Eacritt) Hance; married, Margaret Bertha Bryce, Jan. 19, 1918.

Educated: Technical High School and Graded Schools, D. C.; George Washington University.

Professional: Journalism and scientific work. Faculty member, National Vocational Training Institute, D. C., Mathematics and Journalism.

Aeronautical Activities: Enlisted A.S.E.R.C., Nov. 1917; graduated from Princeton Ground School and sent to Camp Dick, Ellington Field, and San Leon, Tex. where received flying instruction; full gunnery and bombing course and was designated as Night Bombing Aviator; commissioned in Reserves, Dec. 1918; Scientific Staff of U. S. Bureau of Standards, Aeronautics.

Flying Rating: Bombing Aviator, certificate 2190.

War Service: As above.

Washington Unit, A.L. of A.

Present Occupation: President, Yearbook Publishing Co.; Instructor, N.V.T.L.

Address: Clifton Terrace Apts., Washington, D. C.

Clarence Dean Hanscom

HANSCOM, CLARENCE DEAN, Aeronautical Engineer; born, Chelsea, Mass., Dec. 29, 1894; son of Isaiah C. Hanscom and Maud Hallett (Savage) Hanscom.

Educated: High school, Dorchester, Mass.; A.B. 1917, Harvard University.

Aeronautical Activities: Instructor in Aeronautics, U. S. Naval Airplane Inspectors' School, Mass. Inst. of Tech., Oct. 1917 to Oct. 1918; Instructor in Aeronautics, Aeronautical Engineering School, Mass. Inst. of Tech., Oct. 1918 to Feb. 1919; Aeronautical Engineer, Air Service, Oct. 1918 to April 1920; Assistant Chief Engineer, Aerodynamical Laboratory, Mass. Inst. of Tech., Jan. 1919 to April 1920; Chief Engineer, Glenn L. Martin Co., April 1920 to Feb. 1922; Consulting Engineer, Feb. 1922 to date.

War Service: Seaman, 2nd class, Naval Reserve (Aviation), 1917-1920.

Member: Society of Automotive Engineers.

Present Occupation: Consulting Engineer.

Address: 22 Chelsea Place, East Orange, N. J.

Thomas James Hanley Jr.

HANLEY, THOMAS JAMES, JR., Major, Air Service; born, Coshocton, Ohio, March 29, 1893; son of Thomas J. Hanley, Sr. and Mary (O'Connor) Hanley; married, Cecelia Meilleut, June 12, 1917.

Educated: Public and high schools of Coshocton; Sacred Heart Parochial School; U. S. Military Academy.

Professional: Commissioned 2nd Lieut., 23rd Infantry until assigned to Aviation Section.

Aeronautical Activities: Student Officer, San Diego 1916; 1st Aero Squadron, Columbus, N. Mex., April 1917; assisted in the organization of Kelly Field No. 1; Officer in Charge Flying, Chanute Field, 1917; Commanded Carruthers Field, 1918-1920; Field Executive Officer, Langley Field.

Flying Rating: Junior Military Aviator, April 1917; Military Aviator, 1920; Airplane Pilot, 1920.

War Service: As above.

Member: Aero Club of America.

Present Occupation: Instructor, Field Officers School, Air Service.

Address: Langley Field, Va.; home, 803 Chestnut St., Coshocton, Ohio.

Wallace Kinney Harding

HARDING, WALLACE KINNEY, Lumber Business; born, Windsor, Utah, March 22, 1897; son of Winn Jasper Harding and Linda Mable Harding.

Educated: West Lebanon High School; 1919, Dartmouth College.

Professional: Secretary, Wellington Lumber Corp.

Aeronautical Activities: Ground School, M. I. T., 1918; flying training at Miami, Fla.; patrol duty at Cape May, N. J., 1918-1919.

Flying Rating: Naval Aviator No. 979, Aug. 1918; Ensign, Aug. 1918.

War Service: Navy, April 1917 to May 1919.

Member: Aero Club of America.

Present Occupation: Secretary, Wellington Est. Lumber Corp.

Address: 59 Wall St.; home, 1931 Madison Ave., New York City.

Clifford Burke Harmon

HARMON, CLIFFORD BURKE, Real Estate; born, Urban, O., July 5, 1868; son of William R. Harmon and Mary (Wood) Harmon.

Educated: Public Schools; private tutors.

Professional: Wood, Harmon & Company, Real Estate; Clifford B. Harmon & Company, Real Estate; Oil Interests.

Aeronautical Activities: Ballooning twenty

years; Flying 1909; Holder of Duration record, 48 hours 26½ minutes in the air, 1909.

Flying Rating: First man to fly Long Island Sound, 1910, World's record, 2 hours 3½ minutes.

War Service: Major in Air Service; Service Overseas.

Member: Flying Club; Royal Flying Club of London; Many social clubs.

Present Occupation: Real Estate and Oil.

Address: 51 East 42d Street, New York City; home, Harmon-on-Hudson, New York.

Hubert Reilly Harmon

HARMON, HUBERT REILLY, Major, Air Service; born, Chester, Pa., April 3, 1892; son of Millard F. Harmon and Madelin (Kendig) Harmon.

Educated: Public school 102 Brooklyn, N. Y., 8 years; Boys High School, Brooklyn, N. Y., 1 year; Polytechnic Preparatory School, Brooklyn, N. Y., 2½ years; U. S. Military Academy, West Point, N. Y., Graduated 1915.

Aeronautical Activities: Went to Army flying school at San Diego, Calif., on Dec. 8, 1916, Air Service ever since.

Flying Rating: Pilot's license, March 1917, Aero Club of America; Junior Military Aviator, U. S. Army June 27, 1917; Airplane pilot, U. S. Army.

War Service: Aeronautical officer, Southern Department, San Antonio, Texas, and Air Service examining Board, May 1, 1917 to Jan. 4, 1918; Engineer Officer, Kelly Field, Texas, Jan. 4, 1918 to March 4, 1918; Officer in charge of flying, Barron Field, Texas, March 5, 1918 to Sept. 3, 1918; Pursuit School; France, Oct. 29, 1918 to Jan. 5, 1919; Chief of Staff, Air Service; Headquarters, 3d American Army, Coblenz, Germany, Jan. 8, 1919 to Sept. 26, 1919.

Present Occupation: Assistant Executive, Office Chief of Air Service, War Dept., Washington, D. C.

Address: Assistant Executive, Office Chief of Air Service, War Dept., Washington, D. C.; home, Army and Navy Club, Washington, D. C.

Henry William Harms

HARMS, HENRY WILLIAM, Major, Air Service; born, Wentworth, S. D., Nov. 25, 1887; son of Adolph Harms and Sophia Harms; married, Enid Leslie, May 29, 1919.

Educated: Wentworth Grammar School, 1902; Madison High School 1906; one year C. E. University of Minnesota, 1907; U. S. Military Academy, 1912; Aeronautical Engineering Course M. I. T., 1916-1917.

Professional: 4 years, Cadet, U. S. M. A.; 2½ years, U. S. Cavalry; 7 years, Air Service.

Aeronautical Activities: Jan. 1915 to June 1915, flying instruction, aviation school, San Diego, Calif.; July 1915 to Aug. 1915, flying duty, 1st Aero Squadron, Fort Sill, Okla.; Sept. 1915, flying duty, 1st Aero Squadron, Brownsville, Tex.; Oct. 1915 to March 1916, course in aeronautical engineering, Mass. Inst. of Tech.; April 1916 to June 1916, inspection duty, Curtiss Airplane Co., Buffalo, N. Y.; July 1916 to Oct. 1917, duty in Aviation Department, Office, C. S. O., Washington, D. C.; Nov. 1917 to Jan. 1918, Engineering Division, Air Service Headquarters, A.E.F., France; Feb. 1918 to Feb. 1919, Engineering Division, Air Service Headquarters, A.E.F., England; March 1919 to March 1920, Engineering Division, Air Service, McCook Field, Dayton, Ohio; April 1920 to date, Engineering Division Representative, Office, Chief of Air Service, Washington, D. C.

Flying Rating: Junior Military Aviator, 1915, Aero Club of America; 1918, Military Aviator; 1920, Airplane Pilot.

War Service: Air Service, O. C. A. S., April, 1917 to Oct. 1917; Air Service, A. E. F., Nov. 1917 to Feb. 1919; Air Service, Eng. Div., 1919 to date.

Member: Society of Automotive Engineers; Aero Club of America; Army and Navy Club (Wash.); Columbia Country Club, (Wash.).

Present Occupation: Engineering Division Representative O. C. A. S.

Address: Air Service; home, 1626 S St., N. W., Washington, D. C.

Maitland C. Harper

HARPER, MAITLAND C., Architect; born, East Hampton, N. Y., Nov. 29, 1890; son of Wm. St. John Harper and Mary Palmer (Hedderwick) Harper.

Educated: 1915, University of Pennsylvania.

Professional: Architect, 1915-1917; U. S. Army, 1917-1918; Architect, 1918 to date.

Aeronautical Activities: U. S. S. M. A., Cornell University; Park Field; School of Aerial Gunnery, Taliaferro Field, School of Aerial Observers; Langley Field, Va.

Flying Rating: Reserve Military Aviator; Pilot Certificate.

War Service: Air Service, U. S. Army, June 1917 to Dec. 1918.

Member: Aero Club of America.

Present Occupation: Architect.

Address: 101 Park Ave.; home, 527 West 121 St., New York City.



Harold E. Hartney

Frederick Henry Harris

HARRIS, FREDERICK HENRY, Broker; born, Brattleboro, Vt., Sept. 8, 1887; son of Charles Adrian Harris and Lizzie (Morris) Harris.

Educated: Brattleboro High School; B. S. 1911, Dartmouth College.

Professional: Bond Salesman for Baker, Ayling and Young, Boston, Mass., 1912 to 1917; April to Oct. 1919, handling Army and Navy contracts as Washington representative for Curtiss Aeroplane and Motor Corp.

Aeronautical Activities: Gallaudett Aviation School, Nov. 1917; Curtiss Aviation School, Miami, Fla., Jan. to April 1918; Naval Aviation Detachment, M. I. T. Cambridge, Mass., May to Aug. 1918; Naval Air Station, Bay Shore, L. I., Aug. to Sept.; Naval Air Station, Hampton Rds., Va., Sept. 8 to 15; Naval Air Station, Pensacola, Fla. to Feb. 12, 1919; Chairman, Student Council Battalion Commander at Pensacola.

Flying Rating: Naval Aviator; Aviator's License, Aero Club of America.

War Service: Ensign, Naval Reserve Flying Corps.; instructor on flying of H16 flying boat 2 Liberty motors; in charge of all student officers at Naval Air Station (320 Student Officers) Pensacola, Fla.

Books: "Dartmouth Out O' Doors", 1913; Book on Winter Sports.

Member: Aero Club of America.

Present Occupation: Broker.

Address: 220 Barber Bldg., Brattleboro, Vt.

George Blair Harrison

HARRISON, GEORGE BLAIR, Writer; born, Emmetsburg, Iowa, Oct. 5, 1873; son of Thomas Wentworth Harrison and Annie Wallingford (Blair) Harrison; married, Mary E. Bennett, April 18, 1898.

Educated: Public schools of Iowa and Topeka, Kans.; Topeka High School; Washburn College; University of Michigan.

Professional: Railroad or financial reporter and editor of various papers in Topeka, Kansas City, and Los Angeles, 1896-1903, and 1908-1911; with Louisiana Purchase Exposition as chief clerk and editor, 1903-1905; with California Highway Commission as chief of right of way and editor, 1912-1915; president, Pageant Film Corp., 1915-1917.

Aeronautical Activities: Aeronautical Editor of various newspapers; engaged in ballooning, mainly in California; instructor in Signal Corps.; received F.A.I. balloon license No. 32, 1911.

War Service: U. S. Army, July 1917 to 1919; commissioned 2nd Lieut., A. S. S. C., 1st Lieut., Air Service; field balloon officer at Fort Omaha, 1918-1919.

Books: Handbook of Aerial Navigation.

Member: Pacific Aero Club; Aero Club of California; Aeronautical Society of California; Air Pilots Club; Aero Club of Omaha; Aero Club of Southern California.



Henry W. Harms

Present Occupation: Writer.
Address: 3526 South Flower Street, Los Angeles, Calif.

James Hartness

HARTNESS, JAMES, Governor of Vermont; born, Schenectady, N. Y., Sept. 3, 1861; son of John Williams Hartness and Ursula (Jackson) Hartness; married, Lena Sandford Pond, May 13, 1885.

Education: Cleveland Grammar School; M. E. 1910 and L.L.D. 1921, University of Vermont; M.A. 1914, Yale University; L.L.D. 1921, Norwich University.

Professional: President, Jones and Lamson Machine Co., Springfield, Vt.

Flying Rating: Certificate No. 555, Federation Aeronautique Internationale by Aero Club of America, Aug. 16, 1916.

War Service: Food Administrator for Vermont; Chairman of the Committee of Public Safety for Vermont; member of the Commission that represented the United States Air Board at the Inter-Allied Aircraft Standardization Conference at London and Paris during the war.

Member: American Society of Mechanical Engineers; Society of Automotive Engineers; Institute of Mech. Eng. (British); Fellow, Amer. Ass. for Advancement of Science; Fellow, Roy. Soc. for Encouragement of Arts; American Astronomical Society; Fellow, Royal Astronomical Society; Fellow, Royal Aeronautical Society; Aero Club of America; President, Aero Club of Vermont.

Present Occupation: Governor of Vermont; **President,** Jones and Lamson Machine Co.
Address: 30 Orchard St., Springfield, Vt.

Harold Evans Hartney

HARTNEY, HAROLD EVANS, Executive Secretary, Aero Club of America; born, Canada, April 19, 1888; son of James H. Hartney and Annie E. Hartney; married, Irene McGeary, Nov. 11, 1914.

Education: B.A. 1911, University of Toronto; B.A. 1912, University of Saskatchewan; 1914, graduate law Saskatchewan-Barrister and Solicitor.

Professional: Lawyer.

Aeronautical Activities: Oct. 1915, joined Royal Flying Corps. Two years service with same; became captain and received Italian Silver Medal for Valor; Sept. 1917, transferred with rank of Major to American Air Service; organized, trained and took to front 27th Aero Squadron; Aug. 21, 1918, promoted to Group Commander, 1st Pursuit Group; Dec. 1918, duty at G. H. Q. Chaumont; Feb., appointed Lt. Col. and returned to U. S. Office Chief of Air Service and successively held positions as Chief, Training; Acting Chief Operations and Chief, Civil Affairs; resigned, Oct. 1921.

Flying Rating: Airplane Pilot.
War Honors: Distinguished Service Cross; Legion of Honor; Croix de Guerre (2 palms); Italian Silver Medal for Valor; British War Medal; Aero Club Medal of Honor.

Member: Army and Navy Club (Wash.); Aero Club of America; Aero Club of Omaha; Nebraska State Air Association; Princeton Aero Club.

Present Occupation: Executive Secretary, Aero Club of America.
Address: 307 Mills Bldg.; home, 3313 Ross Place, N. W., Washington, D. C.

Frederick Henry Harvey

HARVEY, FREDERICK HENRY, Caterer; born, Kansas City, Mo., Jan. 24, 1896; son of Ford F. Harvey and Josephina (Blair) Harvey.

Education: St. Mark's School, Southborough, Mass.; A.B., Harvard, 1918.

Professional: With Fred Harvey, Inc. Oct. 1919 to date.

Aeronautical Activities: Sergeant, A.S., S.C., Miami, Fla., March 1, 1917; commissioned 1st Lieut. A.S., S.C., June 11, 1917; Kelly Field, July 9, 1917; in charge 27th Aero Squadron, Toronto, Canada, Aug. 12, 1917; asst. O.I.C. flying, Scott Field, Oct. 8, 1917; asst. O.I.C. flying, Ellington Field, Dec. 23, 1917; Carruthers Field, Feb. 7, 1918; promoted to Capt. O.I.C. flying, Feb. 19, 1918; staff 1st Prov. Wing, Mineola, June 7, 1918; sailed for France Oct. 18, 1918; 3rd Aviation Instruction Center Isoudun, Nov. 4 to Dec. 12, 1918; returned to U. S., Feb. 12, 1919; discharged Feb. 14, 1919; commissioned Capt. AS-ORC, April 1, 1919.

Flying Rating: R.M.A., June 11, 1917.
War Service: March 1, 1917 to Feb. 14, 1919.

Member: Flying Club of Kansas City.
Present Occupation: With Fred Harvey, Inc.
Address: Union Station, Kansas City, Mo.; home, 3617 Gillham Road, Kansas City, Mo.

Lloyd L. Harvey

HARVEY, LLOYD L., Captain, Air Service; born, Allegan, Mich., Nov. 17, 1891; son of Henry W. Harvey and Florence (McEntee) Harvey; married, Eleanor Dow, June 2, 1915.

Education: Public and high schools.
Professional: Automobile sales agent; civilian aviator, 1916-1917.

Aeronautical Activities: 1916-1917, Civilian aviator; 1917 to date, pilot, U. S. Army.

Flying Rating: Airplane Pilot.

War Service: Army, 1917 to date.

Present Occupation: Captain, U. S. Army Air Service.
Address: c/o The Adjutant General of the Army, Washington, D. C.

George William Haskins

HASKINS, GEORGE WILLIAM, Aeronautical Engineer; born, Waterville, Ohio, March 11, 1892; son of William Liberty Haskins and Martha Fearnside Haskins.

Education: High school, Waterville, Ohio; Valparaiso University; B.S. in M.E. 1916, Purdue University; Aeronautical Engineering, Boston Technology Institute, 1919.

Professional: Special apprentice, New York Central Lines before 1916; Engineering Salesmanship after graduation till enlistment in the Air Service.

Aeronautical Activities: Ground School, Columbus, Ohio, Dec. 1917; primary flying training at Wichita Falls, Tex. and Rockwell Field, Oct. 1918; Engineering Research at McCook Field in materials, aerodynamics, and design to date.

Flying Rating: Reserve Military Aviator.
War Service: Army.

Member: American Society of Mechanical Engineers.

Present Occupation: Aeronautical Engineering, McCook Field.

Address: McCook Field; home, 23 W. First St., Dayton, Ohio.

Lauritz G. Haugen

HAUGEN, LAURITZ G., Major, Air Service Reserve; born, Netherwood, Iowa, April 26, 1892; son of G. N. Haugen and Elise B. (Evenson) Haugen.

Education: Public schools, Northwood, Iowa; Shattuck Military School, Faribault, Minnesota; LL. B., LL. M., 1916, George Washington Law School; Master Patent Law, 1916, Georgetown University Law School.

Professional: Attorney; Secretary of Committee on Agriculture, House of Representatives, Washington, D. C.

Flying Rating: Reserve Military Aviator during war and now in the reserve.

War Service: Aide to Major General Kenly, Director of Military Aeronautics; Secretary, Promotion Board of Air Service; Secretary of Joint Army-Navy Board on Aeronautic Cognizance.

Present Occupation: Secretary, Committee on Agriculture, House of Representatives.

Address: House of Representatives, Washington, D. C.; home, Northwood, Iowa.

Beckwith Havens

HAVENS, BECKWITH, Aircraft Constructor, born, New York City, May 29, 1890; son of A. Britton Havens and Liela (Beckwith) Havens.

Education: Public Schools of New York and California.

Professional: Automobile Salesman 1906 to 1910; Exporting motor Federal trucks 1914, Denby 1914 to 1919 travelling over Europe, Scandinavia, Australasia, South Sea Islands and the Orient.

Aeronautical Activities: Joined Glenn Curtiss in 1910; Exhibition pilot 1911-12-13; Winner Great Lakes Race (Chicago-Detroit) 1913 and continued flight to New York; holder of Curtiss Gold Medal and Aero Club Medal of Merit (1913); six months flying 1920 for Curtiss N. Y. Aircraft Corp.

Flying Rating: Aero Club of America license No. 127; U. S. Naval Aviator No. 524.

War Service: Lieut. U. S. Naval Reserve Flying Corps.

Member: Aero Club of America, New York Club; Veteran Corps of Artillery and American Legion.

Present Occupation: Officer The Airships Mfg. Co. of America.

Address: Hammondsport, N. Y.; home, New York City.

Harry Huber Haw

HAW, HARRY HUBER, Commercial Aviator; born, Greenwood, Wis., Jan. 10, 1894; son of John Haw and Clara (Perkins) Haw.

Education: Public schools of Augusta, Wis.; A.B., 1918, College of the Pacific.

Professional: Bridge carpenter, Canadian Northern Railroad, 1913-1914; Business Manager, Pacific Weekly, 1915-1916; Undergraduate Manager, College Athletics, 1916-1917.

Aeronautical Activities: School of Military Aeronautics, Berkeley, Calif.; Pursuit Course, Carlstrom Field; Vice President and Engineering Officer, Fort Pierre Aero Co., S. D.; Pilot, Curtiss Northwest Airplane Co.; Pilot, Spaulding-Willett Airplane Co.; cross-country flights through a great many of the states and Canada and Mexico.

Flying Rating: Reserve Military Aviator.
War Service: Dec. 1917 to April 1919.

Present Occupation: Airplane Pilot.

Address: Huron Aerial Rapid Transit Co., Huron, S. D.; home, 1028 13th Street N., Fargo, N. D.

Alan Ramsey Hawley

HAWLEY, ALAN RAMSEY, Retired; born, Perth Amboy, N. J., July 29, 1869; son of Peter Radcliffe Hawley and Isabelle (Merritt) Hawley.

Education: Trinity School.

Professional: Stock Broker, retired 1912.
Aeronautical Activities: Pilot of free balloons; winner of Gordon Bennett Balloon Race, 1910; holder of Lahm Trophy and American long distance record, 1172 miles.

Flying Rating: Free Balloon Pilot, No. 7.

Member: Life Member, New York Athletic Club; Founder, Member Automobile Club of America; Founder, Member Aero Club of America.

Present Occupation: Retired.
Address: 139 West 76 Street, New York City.

Robert J. Hawley

HAWLEY, ROBERT J., Aviator; born, Northumberland, Pa., May 31, 1901; son of C. B. Hawley and Emma W. (Myers) Hawley.

Education: Sunbury High School; Northumberland High School; S. A. T. C., 1918, Susquehanna University; Pennsylvania State College, Forestry, 1921.

Aeronautical Activities: Entered Essington School of Aviation, Aug. 3, 1919; graduated as operator of seaplanes and flying boats, Oct. 9 of same year; returned to Essington as reserve pilot, April 15, 1920 and left May 15 to take exam. for Army Air Service but was rejected, too young.

Flying Rating: Diploma of Essington School of Aviation, Oct. 9, 1919.

War Service: S. A. T. C. at Susquehanna, 1918.

Member: Aviators' Club of Pennsylvania, Philadelphia, Pa.

Address: 394 Queen Street, Northumberland, Pa.

Willis M. Hawley

HAWLEY, WILLIS M., Contractor; born, Chautauque, N. Y., July 7, 1896; son of Lucius E. Hawley and Frances M. Hawley; married, Lillian Chandler, Nov. 22, 1919.

Education: Public schools of Ben Avon, Pa.; three years, Carnegie Inst. of Tech.; one year, University of Southern California.

Professional: Electrical Engineer, Pittsburgh, Pa.; Interior Decorator, Los Angeles, Calif.

Aeronautical Activities: S. M. A., Berkeley, Calif., 1918; Kelly Field, Nov. 1918 to May 1919; commissioned 2nd Lieut., S. O. R. C., May 1919.

Flying Rating: Reserve Military Aviator.

War Service: Feb. 1917 to May 1919.

Present Occupation: Decorator.

Address: 321 S. Hoover St.; home, 185 California St., Walnut Park, Los Angeles, Calif.

John Fillmore Hayford

HAYFORD, JOHN FILLMORE, Professor; born, Rouse's Point, N. Y., May 19, 1868; son of Hiram Hayford and Mildred Alevia (Fillmore) Hayford; married, Lucy Stone, Oct. 11, 1894.

Education: C.E., Cornell, 1889.

Professional: Appointed Computer, U. S. Coast & Geodetic Survey, June 1889; Asst. Astronomer, International Boundary Commission, 1892-1893; Aid and later Asst., Coast & Geodetic Survey, 1894-1895; Instructor in Civil Engineering, Cornell University, 1895-1898; expert computer and geodesist, Coast & Geodetic Survey, 1898-1899; Inspector of geodetic work and Chief computing div., 1900-1909; Director, College of Engineering, Northwestern University, Sept. 1, 1909 to date.

Aeronautical Activities: Appointed one of original members of National Advisory Committee for Aeronautics, 1915.

Books: Geodetic Astronomy, 1898; also numerous monographs in reports of U. S. Coast & Geodetic Survey.

Member: Fellow, Amer. Assoc. for the Advancement of Science; Nat. Academy of Science; Amer. Philosophical Society; Amer. Astronomical Society; Amer. Soc. of Civil Engineers; Western Soc. of Engineers.

Present Occupation: Director, College of Engineering, Northwestern University; member, National Advisory Committee for Aeronautics.

Address: 574 Ingleside Park, Evanston, Ill.

Edward Grissom Haynes

HAYNES, EDWARD GRISSOM, 1st Lieut., Air Service; born, Edna, Tex., Sept. 25, 1897; son of Willard Calvin Haynes, M. D. and Margaret Haynes.

Education: Public and high school, San Antonio, Tex.

Professional: S. P. Railroad clerk, 1912-1914; farmer, 1914-1915; S. A. & A. P. Railroad, San Antonio, Tex. 1916-1917.

Aeronautical Activities: Training at various fields, 1917-1919; Test Pilot at Bolling Field.

Flying Rating: Reserve Military Aviator, April 1918; Airplane Pilot, Sept. 1919.

War Service: Air Service, May 1917 to Nov. 1918.

Present Occupation: 1st Lieut., Air Service.
Address: Langley Field, Va.

Guy Vernon Head

HEAD, GUY VERNON, Attorney at Law; born, Matthews, Okla., Jan. 2, 1893; son of Thomas Jacob Head and Polly (Morrison) Head; married, Mabel Louise Hurst, Aug. 16, 1917.

Educated: Public schools of Colorado Springs, Colo. and West Plains, Mo.; A.B. 1914, University of Missouri; LL.B. 1917, Harvard Law School.

Professional: Attorney, Kansas City, Mo. since March 1919.

Aeronautical Activities: On flying status, June 1918; flew at Brooks Field and Love Field from June 1918 to Feb. 1919.

Flying Rating: Reserve Military Aviator, Oct. 1918.

War Service: 1st R.O.T.C., Fort Riley, Kans.; commissioned Captain, Infantry; transferred to Aviation Section, Signal Reserve Corps, March 1918; commissioned Major, Air Service Reserve, May 1919.

Present Occupation: Attorney at Law.
Address: 303 Fidelity Trust Bldg.; home, 2721 Grove St., Kansas City, Mo.

Spencer Heath

HEATH, SPENCER, Propeller manufacturer; born, Vienna, Fairfax Co., Virginia, Jan. 3, 1876; son of Spencer Anson Heath and Selinda Amelia Heath.

Educated: Washington High School; Corcoran Scientific School of Columbia University; LL.B. 1905, LL.M. 1906, National University.

Professional: Machine designer and engineer, mechanical, electrical, hydraulic and automotive with Elgin Nat'l Watch Co., Western Electric Co., Crane Co., Hartley Motor Co., Purdy & Henderson, Engineers, etc. 1898-1902; engineering work in connection with depots for coal, U. S. Navy Dept., 1902-1906; Attorney at Law, National Union Bldg., Washington, D. C., 1906-1909; experimental and investigation work on aircraft propellers, Washington, D. C. 1909; manufacturer of aircraft propellers, Washington, D. C., 1909-1912; General Manager and Consulting Engineer, Gyro Motor Co., (aeronautical) Washington, D. C., 1911-1912; Pres. American Propeller Mfg. Co., Manufacturers of Paragon Propellers, Baltimore, Md., to date.

Member: Society Automotive Engineers; Aero Club of America; Old Colony Club; City Club of Baltimore.

Present Occupation: President, American Propeller Manufacturing Co.

Address: 233 E. Hamburg St., Baltimore, Md.; home, Elkridge, Maryland.

Theodore E. Hedlund

HEDLUND, THEODORE E., Newspaper writer; born, Worcester, Mass., March 5, 1890; married, Mary Frances Gallagher, Aug. 10, 1918.

Educated: Worcester High School.

Professional: Editorial Departments, Worcester Telegram, 1909-1912; Boston Herald, 1912-1913; Boston Post, 1913 to present time; since the war has been Aviation Editor of the Boston Post.

Aeronautical Activities: School Military Aeronautics, Mass. Inst. of Tech., 1917; commissioned 2nd Lieut., March 12, 1918; night flying and bombing training, Ellington Field, Houston, Tex. from May to Aug. 1918; night flying on coast of England up to Armistice.

Flying Rating: Reserve Military Aviator.

War Service: Officers training camp, Plattsburgh, N. Y. 1917; then Air Service work and qualified as pilot at Park Field, Tenn.

Books: "How Man Learned to Fly."

Member: Organized and served as its first President, the Aero Club of Massachusetts.

Present Occupation: Aviation Editor, Boston Post, Boston, Mass.

Address: Boston Post.

Leo Gerald Heffernan

HEFFERNAN, LEO GERALD, Major, Air Service; born, Larksville, Pa., April 23, 1889; son of Andrew Heffernan and Mary (Connole) Heffernan; married, Jane Davis, Feb. 11, 1921.

Educated: Public and high schools, Plymouth, Pa.; U. S. Military Academy, 1911.

Professional: 2nd Lieut., 5th Cavalry, June 13, 1911; 1st Lieut. Cavalry, July 1, 1916; Capt., Air Service, Sept. 3, 1916; Major, Air Service, May 15, 1917; Capt., Cavalry, May 15, 1919; Major, Cavalry, July 1, 1920.

Aeronautical Activities: Student, Aviation Section, Signal Corps, Dec. 14, 1915, San Diego, Calif.; pilot, 1st Aero Squadron, Mexican Punitive Expedition, Aug. 16, 1916; Capt. J. M. A., Sept. 2, 1916; pilot, 3rd Aero Squadron, San Antonio, Tex., April 3, 1917; C. O., Aviation Recruit Camp, San Antonio, Tex., May 15, 1917; C. O., 12th Squadron, June 16, 1917; Officer in Charge of Training and C. O. Wilbur Wright Field, July 8, 1917 to Jan. 15, 1918; Asst. Officer in Charge of Flying, Gerstner Field, Jan. 19; Assistant Officer in Charge Flying, Tyler Field, Montgomery, Ala., April 15, 1918 to July 9, 1918; Officer in Charge of Training and C.O., Kelly Field, Tex.,

July 12, 1918 to Aug. 31, 1918; Student observer and graduate 2nd A.I.C., Tours, France, Oct. 5, 1918 to Nov. 12, 1918; Corps Air Officer, 9th Army Corps, and commanding in order, 2nd Army Observation Group, 4th and 5th Pursuit Groups, 2nd Day Bombardment Group, Nov. 14, 1918 to April 15, 1919; command Chapman Field, Fla., June 15, 1919 to Oct. 15, 1919; redetailed to Air Service, Aug. 14, 1920; duty March Field, Calif., Oct. 14, 1920 to Nov. 6, 1920; command 1st Surveillance Group, El Paso, Tex., Nov. 7, 1920 to date; transferred to Air Service April 17, 1921.

Flying Rating: Pilot, Aero Club, April 1916; Junior Military Aviator, Sept. 8, 1916; Airplane Pilot, Jan. 17, 1921.

Member: Pennsylvania Military Order of Foreign Wars; Army Mutual (Wash.).

Present Occupation: Commanding 1st Surveillance Group.

Address: Fort Bliss, Texas; home, 1115 Montana St., El Paso, Tex.



Henry B. Hersey

Charles Heidt

HEIDT, CHARLES, Stationer; born, New York, N. Y., Aug. 9, 1894; son of Joseph Heidt and Anna Heidt.

Educated: Morris High School; C.E. 1915, Cornell University.

Professional: Civil Engineer, Public Service Comm. of New York, 1915-1916; Civil Engineer, New York Central R. R., 1916-1920; stationery business, 1921.

Aeronautical Activities: Flying Cadet, Princeton, Dallas, San Diego, Riverside, 1918-1919; completed primary and advanced pursuit flying, including aerial gunnery, combat, etc.

Flying Rating: Reserve Military Aviator.

War Service: Army, Nov. 1917 to Jan. 1919.

Present Occupation: Stationery business.

Address: 799 Broadway; home 973 Whitlock Ave., New York, N. Y.

Lewis Victor Heilbrunn

HEILBRUNN, LEWIS VICTOR, Assistant professor, University of Michigan; born, Brooklyn, N. Y., Jan. 24, 1892; son of Victor Heilbrunn and Matilda Heilbrunn.

Educated: Boys High School, Brooklyn; A.B. 1911, Cornell University; Ph.D. 1914, University of Chicago.

Professional: 1913-1914; Associate, Zoology Dept., University of Chicago, 1914-1916; Instructor, Anatomy Dept., University of Illinois Medical School, 1916-1917; Instructor, Zoology Dept., University of Michigan, 1919 to 1921; assistant professor, 1921 to date.

Aeronautical Activities: Flying instruction, 1917, Ashburn Field and Chanute Field; Issoudun,

Dec. 1917 to Feb. 1918; 88th Aero Squadron, Feb. 1918 to Jan. 1919.

Flying Rating: Reserve Military Aviator.

War Service: U. S. Army, May 1917 to April 1919; Officers Reserve Corps, April 1919 to date.

War Honors: 3 citations.

Member: Fellow, American Assn. Advancement of Science; American Society of Zoologists.

Present Occupation: Assistant professor, Zoology Dept., University of Michigan.

Address: 12 Geddes Heights, Ann Arbor, Mich.

Henry Theodore Hemming

HEMMING, HENRY THEODORE, Printing Business; born, Canton, Mo., Aug. 11, 1893; son of Julius Theodore Hemming and Jeniza Evalyn (Bailey) Hemming.

Educated: Canton, Mo. High School; 1915, Central College, Fayette, Mo.; 1917, Culver Stockton College, Canton, Mo.; 1918, S.M.A. Georgia Tech.

Professional: Printing business.

Aeronautical Activities: 297 Aero Prov. Service Squadron, later C.O. 299 Aero Prov. Service Squadron, Air Service School for Radio Mechanics, Carnegie Institute of Technology, 1918.

War Service: Air Service.

Present Occupation: Department of Research, United Typothetae of America.

Address: 550 Transportation Bldg., Chicago, Ill.; home, 401 N. Tenth St., Canton, Mo.

Randall Thomas Henderson

HENDERSON, RANDALL THOMAS, Newspaper Editor and Publisher; born, Clarinda, Iowa, April 12, 1888; son of Nelson R. Henderson and Katherine (Thomas) Henderson; married, Vera Louise Riopel, Oct. 17, 1911.

Educated: Grammar and high schools of Shenandoah, Iowa; A.B. 1911, University of Southern California.

Professional: Editor and Publisher.

Aeronautical Activities: Ground School, Ohio State; Training at Camp McArthur, Camp Greene, Kelly Field.

Flying Rating: Reserve Military Aviator.

Member: Aero Club of Southern California.

Present Occupation: Newspaper editor and publisher.

Address: Blythe, Calif.

Victor Daniel Herbster

HERBSTER, VICTOR DANIEL, Lt. Comdr. U. S. Navy; born, West Newton, Pa., July 20, 1885; son of S. K. Herbster and Carolyn Herbster; married, Vaudine Nolan, June 3, 1919.

Educated: Public and high schools of Irwin, Pa.; 1908, U. S. Naval Academy.

Aeronautical Activities: Ordered to aeronautical duty, Oct. 1911, Annapolis, Md., San Diego, Dayton, Pensacola, Marblehead, Washington, Germany, England, France, Ireland, Panama, Canal Zone; learned to fly on Model B, Wright, experimented with pontoons on this machine 1911-12; experimental aviation work on Burgess, Curtiss, Naval aircraft for several years; Constructed and operated Naval air station, Wexford, during war; station pilots bombed four submarines; Commanding Officer, U. S. Naval Air Stations in Ireland; took command Coco Solo, Dec. 2, 1919.

Flying Rating: Naval Aviator No. 4

War Service: Armed Guard Transport; Commanding Officer, Naval Air Station, Wexford, Ireland.

Member: Army and Navy Club (Wash.).

Present Occupation: Commanding Officer, U. S. Naval Air Station, Coco Solo, Canal Zone.

Address: c/o Navy Department, Washington, D. C.

Henry Blanchard Hersey

HERSEY, HENRY BLANCHARD, Meteorologist; born, Williamstown, Vt., July 28, 1861; son of Joel Hersey and Recta Wheelock (Blanchard) Hersey.

Educated: B.S. 1885, M.S. 1906, Norwich University; course at U. S. Signal Service Tech. School, Ft. Myer, Va.

Professional: In service of U. S. Weather Bureau, 1885 to date.

Aeronautical Activities: Executive Officer, Wellman Chicago Record-Herald Polar Expedition, 1906-1907; experienced meteorologist and balloonist, being a licensed aeronaut pilot of the Aero Club of France and of the Aero Club of America; assisted Lt. Frank P. Lahm, U. S. A., in the International Balloon Race at Paris, 1906, helping to win the James Gordon-Bennett cup; sailed the balloon "United States" in the International race at St. Louis, 1907, crossing lakes Michigan, St. Clair and Erie, and landing in Canada.

Flying Rating: Junior Military Aeronaut, July 1917.

War Service: Maj. 1st U. S. Vol. Cav. (Roosevelt's Rough Riders) during Spanish-American War; appointed Major, Aviation Section, Signal Corps, May 1917; placed in command U. S. A. Balloon School, Ft. Omaha, Nebr.; promoted to Lt. Col., Signal Corps, U. S. A., Sept. 1917; served with Balloon Division, Air Service, in France, Oct. 1918 to March 1919.

Member: Fellow, Royal Meteorology Society (London); Cosmos (Wash.); University Club (Los Angeles).
Present Occupation: U. S. Weather Bureau, Los Angeles, Calif.

Harlan Lester Heward

HEWARD, HARLAN LESTER, Attorney; born, Gem, Idaho, May 26, 1892; son of John H. Heward and Theresa (Nordquist) Heward.
Educated: Public schools of Helena, Mont., Santa Monica, Calif., Mullan, Idaho, Reno, Nev.; A.B. 1913, University of California.
Professional: Admitted to Bar in Nevada, 1914; practiced law at Wallace, Idaho, 1916-1917; 1919, practiced Law at Reno, Nev.; member of Nevada Legislature, 1921.
Aeronautical Activities: Training at Post Field, Camp Dick, Selfridge Field, Hazelhurst Field, and Brindley Field.
Flying Rating: Reserve Military Aviator.
War Service: Infantry, Aug. 1917 to March 1918; Air Service, March 1918 to Jan. 1919.
Present Occupation: Assistant District Attorney, Washoe County, Nev.
Address: 15 W. Taylor St., Reno, Nev.

Robert P. Hewitt

HEWITT, ROBERT P., Test Pilot; born, Philadelphia, Pa., July 2, 1894; son of Luther E. Hewitt and Nellie (Jennings) Hewitt; married, Millicent G. Hand, Dec. 7, 1917.
Educated: Central High School, Philadelphia, Pa.; Temple University.
Professional: Civilian Aviation.
Aeronautical Activities: 1911, Building and flying gliders; 1917-1918, instructing and test pilot, Call Field; 1918, detached service, Naval Air Station, Miami; 1919, Chief Pilot, Aero Limited; 1920, Aero Ltd. and Aero Service Corp., Philadelphia, Pa.; 1921-1922, Wright Aeronautical Corp.
Flying Rating: Aero Club Pilots Certificate No. 3609; Experts Certificate No. 228; Civilian No. 701; Reserve Military Aviator.
War Service: 2nd Pennsylvania F. A. from beginning of war to Sept. 1917 when transferred to Air Service.
Member: Aero Club of America; Automobile Association; American Legion.
Present Occupation: Test Pilot, Wright Aeronautical Corp.
Address: 238 Lewis St., Paterson, N. J.; home, 111 E. Durham St., Philadelphia, Pa.

Donald Heyer

HEYER, DONALD, Commercial Aviator; born, Council Bluffs, Iowa, Feb. 10, 1900; son of Thomas J. Heyer and Virginia (Pope) Heyer.
Educated: Public schools, Council Bluffs, Iowa; private school, Laird, Colo.; Iowa College, Council Bluffs, Iowa.
Aeronautical Activities: Model and experimental work, beginning in 1916; designed cabin biplane, powered by three steam motors and built models of same, 1916; aeronautical development work, 1917; primary training, March Field, advance training, Rockwell Field, service on Mexican Border Patrol, Forest Patrols (Oregon) and artillery Liaison, Crissy Field, Aug. 1918 to Feb. 1921.
Flying Rating: Airplane Pilot.
Member: Vice President, Oakland Aero Club.
Present Occupation: Commercial Aviator.
Address: Oakland, Iowa.

Vincent Eaton Heywood

HEYWOOD, VINCENT EATON, Mechanical Engineer; born, Springfield, Mass., Jan. 20, 1889; son of Charles Henry Heywood and Cora M. Heywood; married, Gwenna M. Crane, June 9, 1920.
Educated: Lake Forest Academy, Lake Forest College.
Professional: Draftsman, Commonwealth Edison Co., Chicago, 1911; Draftsman, C. Barbien, Chicago, 1912-1913; Mechanical Engineer, U. S. Envelope Co., 1913 and 1921 to date.
Aeronautical Activities: Trained at Tours, France as Cadet and ex-ambulance; trained at Issoudun (Chasse); at front, Mar. 17, 1918; Toul Sector, June 1918; Vosges Sector, July 1918; St. Mihiel and Argonne offensives with 99 Aero Squadron.
Flying Rating: Brevet d'Aviateur Militaire Française, No. 10,153; Junior Military Aviator.
War Service: In American Ambulance Field Service from Dec. 1916; commissioned 1st Lieut. March 6, 1918.
Honors: Croix de Guerre; Honorable mention, Lieut. d'Hallory of S.S.N. Sept. 17, 1917 for valor under fire.
Member: Aero Club of America, Aero Club of Massachusetts.
Present Occupation: Mechanical Engineer.
Address: 75 Grove St.; home, 12 Boynton St., Worcester, Mass.

Horace Meek Hickam

HICKAM, HORACE MEEK, Major, U. S. Army; born, Spencer, Ind., Aug. 14, 1885; son of

Hon. Willis Hickam and Sarah Hickam; married, Helen Johnson Bamber, April 20, 1912.
Educated: Spencer high school; Indiana University one year; U. S. Military Academy.

Aeronautical Activities: Primary training, May 1918; Pursuit and Aerial Gunnery, Aug. to Sept. 1918; Command of Pursuit and Gunnery School, Dorr and Carlstrom Fields, Fla., Oct. 1918 to Feb. 1919; Chief, Information Group, Air Service, since Feb. 1919.

Flying Rating: J. M. A., pursuit pilot.
War Service: Concentration Camp, Garden City, Sept. 1917, May 1918, Pilot's Training, May to Sept. 1918; Command of Pursuit and Gunnery School, Sept. 1918 to Feb. 1919; Chief, Information Group, since Feb. 1919.

Present Occupation: Chief of Information Group, Air Service

Member: Aero Club of America; Army and Navy Air Service Association.
Address: Air Service, Washington, D. C.; home, 801, The Cordova, 20th & Fla. Ave., Washington, D. C.



Horace M. Hickam

Robert Coffin Hilldale

HILLDALE, ROBERT COFFIN, Lawyer; born, Philadelphia, Pa., Dec. 11, 1889; son of John A. M. Hilldale and Minnie D. (Coffin) Hilldale; married, Elsa Margaretha Muller.
Educated: Grammar school; Waltham New Church School; Temple College; LL.B. and LL.M., National University (Law School); American University.

Professional: Assistant Secretary, American Institute of Child Life, 1912-1914; student-at-law, 1914-1918; Production Expert, Signal Corps, Aviation Sec., 1918; 1st Lieut., Air Service, 1918-1919; member of the Bar, District of Columbia, 1920 to date; instructor at National University (Law School), Washington Law School and Research University; member of law firm of Stovall & Hilldale, Munsey Building, Washington, D. C.

Aeronautical Activities: Associated with W. W. Montgomery, Jr., of Philadelphia, chief of the Legal Department, Bureau of Aircraft Production, where Aircraft Production contracts were negotiated and drawn and miscellaneous legal affairs of Aircraft Production handled; 1st Lieut., Air Service, Nov. 1918 to Oct. 1919.

Member: Pennsylvania Society; Washington Board of Trade; American Legion; American Society of International Law; Chi Psi Omega.

Present Occupation: Lawyer.
Address: Munsey Bldg., Washington, D. C.; home, Chevy Chase, Md.

Harold Morton Hine

HINE, HAROLD MORTON, Research Engineer; born, New Haven Conn., June 28, 1887; son of Rufus Edwin Hine and Emily Watkins (Hovey) Hine; married, Ruth Eldridge Pember, April 18, 1917.

Educated: Public schools of New Haven, Conn.; B.S., Wesleyan University, 1912; M.S., Trinity College, 1920.

Professional: Science Instructor, Enfield and Hartford, Conn., 1912-1917; research and safety engineering, Travelers Insurance Co., 1919 to date.

Aeronautical Activities: Flying cadet, Collegiate Balloon School, Macon, Ga., Dec. 1917 to March 1918; flying cadet, Instructor and Asst. Post Signal Officer, Army Balloon School, Fort Omaha, March 1918 to Jan. 1919; research and

investigation of the subject of aeronautics in connection with aircraft insurance, 1919 to date.

Flying Rating: Free Balloon Pilot, Ae.C.A. License 482; Aerial Observer, July 26, 1918.

War Service: Dec. 1917 to Jan. 1919.

Books: Chief author "Airplanes and Safety", Travelers Insurance Co.

Member: American Society of Safety Engineers; American Society for the Advancement of Science; Army and Navy Air Service Association; Aero Club of Hartford; Sons of the American Revolution; University Club of Hartford.

Present Occupation: Research and Safety Engineer, Travelers Insurance Co.

Address: 700 Main St., Hartford, Conn.; home, 159 North Beacon St., Hartford, Conn.

John Willis Hines

HINES, JOHN WILLIS, Engineer; born, Riverton, Conn., Dec. 12, 1891; son of John T. Hines and Julia C. Hines.

Educated: Winsted Grammar School; Gilbert School, Winsted, Conn.; Farmington High School; B.S. 1914, Mass. Inst. of Tech.

Professional: American Tel. & Tel. Co. Aug. 1914 to date.

Aeronautical Activities: March 1916 to March 1917, Aeronautical Section, Naval Militia of New Jersey; Apr.-Dec. 1917 U. S. Naval Air Station, Bay Shore, L. I.; Ground School, Mass. Inst. of Tech.; Jan.-Dec. 1918 Naval Air Station, Pensacola, Fla.; bombing and machine gun practice, France; U. S. Naval Air Station, Killingham, England; North Sea Patrol for submarines and convoy for merchant ships; Royal Seaplane Station, Scotland for cooperation with British Grand Fleet; Jan. 1919 to June 1919, U. S. Naval Air Station, Chatham, Mass.

Flying Rating: Naval Aviators Certificate No. 338.

War Service: As above.

War Honors: Citation, Nov. 11, 1920.

Member: Technology Club (N. Y.).

Present Occupation: Engineering Department, American Tel. & Tel. Co.

Address: 195 Broadway; home, 17 Gramercy Park, New York City.

Stacy C. Hinkle

HINKLE, STACY C., 1st Lieut., Air Service; born, Delphi, Ind., Oct. 4, 1895; son of Charles W. Hinkle and Adelle Hinkle; married, Gladys Ruth Gaffield, April 14, 1920.

Educated: Rushville High School; two years, Carnegie Institute of Technology, Pittsburgh, Pa.

Aeronautical Activities: Ground School, Princeton University, Jan. 3 to March 9, 1918; took bombing course at Ellington Field, April 1 to July 1918; Aerial Gunnery School, San Leon, Tex. to Oct. 1918; Casual Officers Detachment, Garden City, L. I., Oct. 1918 to Feb. 1919; Ellington Field to June 20, 1919; El Paso, Tex. on border patrol, June 22, 1919 to date.

Flying Rating: Aerial Bomber, July 1918; Aerial Gunner, Sept. 1918; Airplane Pilot, Oct. 1919.

Present Occupation: 1st Lieut., Army Air Service.

Address: 1019 Elm Street, El Paso, Tex.; home, 228 West 5th Street, Rushville, Ind.

James Pratt Hodges

HODGES, JAMES PRATT, 1st Lieut., Air Service; born, Oakley, Md., Oct. 7, 1894; son of Thomas G. Hodges and Corine (MacWilliams) Hodges; married, Eunice Palmore Fadeley, March 14, 1917.

Educated: High school.

Aeronautical Activities: Training at Park Field, 1917; appointed Assistant Stage Commander, Formation Stage, 1918; appointed Formation Stage Commander, Oct. 1918; student at school of aerial photography, 1919; C. O. 7th Photo Section, May 1920 to March 1921; C. O. Photographic School, Air Service, April 1921 to date.

Flying Rating: Reserve Military Aviator; Airplane Pilot.

War Service: 1917 to date.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.; home, Congress Heights, Washington, D. C.

Henry I. Hoot

HOOT, HENRY I., Junior Mechanical Engineer; born, Lewistown, Pa., June 19, 1897; son of Henry Z. Hoot and Mary T. Hoot; married, Alice B. Fricke, Sept. 8, 1921.

Educated: Friends' Central School, Philadelphia, Pa.; A.B. 1920, Mechanical Engineering, Swarthmore College, Swarthmore, Pa.

Professional: Engineer for Philadelphia Electric Co., 1917.

Aeronautical Activities: Test Section, Naval Aircraft Factory, Philadelphia, Pa., 1918; National Advisory Committee for Aeronautics, Research Laboratory, Langley Field, June 1920 to date.

Present Occupation: Junior Mechanical Engineer, Aeronautical Research Laboratory.

Address: Langley Field, Va.; home, Newport News, Va.

Nelson Sawtelle Hopkins

HOPKINS, NELSON SAWTELLE, Manufacturer; born, Williamsville, N. Y., May 1, 1870; son of Timothy Augustus Hopkins and Elvira Marie (Sawtelle) Hopkins.

Educated: Williamsville public schools; Chicago Manual Training School, 1889.

Professional: Designed and built three designs of the earliest motor bicycles, 1894-1895; Consulting and Designing Engineer until 1906; Manager and Treasurer of Wirt Mfg. Co., 1906-1911; Manager, Curtiss Airplane Co. of Canada; with Curtiss Aeroplane and Motor Corp., Buffalo, N. Y., 1916; Phenix Aircraft Products Co., Williamsville, N. Y.

Aeronautical Activities: Organized the factory and manager of the Curtiss Aeroplane Co. of Can. and Curtiss Airplanes and Motors Ltd., Toronto, Canada; 1915 building JN planes for British Admiralty and all ailerons for all Curtiss airplanes made in the U. S. and shipped to Europe, 1915; built model C or Canada, first large successful twin engine land-plane, 1915; directed development of nitrate and acetate dopes for Curtiss Co. in 1915 and started development of Fireproof dopes and doping methods for aircraft; developed fireproof paint for aircraft woodwork, waterproofed and fireproofed cloths and special fireproof dope for "lighter-than-air" craft.

Member: Aero Club of America.
Present Occupation: President, Phenix Aircraft Products Co.,
Address: Williamsville, N. Y.

Bushrod Hoppin

HOPPIN, BUSHROD, 1st Lieut., Air Service; born, Ft. Wingate, N. Mex., Feb. 23, 1893; son of Curtis B. Hoppin and Elizabeth D. Hoppin.

Educated: Englewood High School; Central High School, Washington, D. C.; Dowds Academy, two years.

Aeronautical Activities: Preliminary training, Sept. 1, 1917 to May 4, 1918; finished flying training with French, Aug. 7, 1918; assigned to Pursuit Group, Jan. 1920.

Flying Rating: Military Aviator (French); Airplane Pilot.

War Service: Army, July 31, 1917 to present date.

Present Occupation: 1st Lieut., Air Service.

Address: Wellington Apt., Washington, D. C.

William Wallace Hosp

HOSP, WILLIAM WALLACE, Commercial Aviator; born, Washington, D. C., Oct. 18, 1890; son of John Hosp and Mary Hosp.

Educated: Public school; business high school; four year practical training in mechanics; School of Military Aeronautics, State University of Texas.

Professional: Executive Aviation School, 1915; exhibition flying, 1916-1917; airplane manufacturing, 1919-1920; aviation, advertising, selling, 1920 to present.

Aeronautical Activities: Assisted in organizing O. E. Williams School of Aviation, Fenton, Mich., Nov. 1915; assisted Anthony Hoesel in building first O. E. Williams, 120 hp. airplane motor, Dec. 1915; assisted in organizing Flint Aircraft Co., Flint, Mich., April 1917; entered U. S. Military School of Aeronautics, Dec. 1917; test pilot for Cantilever Airplane Co., April 1919; associated with Prof. David Todd in Aeronautical and Business Research, June 1920; established Aerial Sales Service, Inc. for associating aviation with advertising, selling and representing manufacturers, Sept. 1920.

Flying Rating: Reserve Military Aviator.

War Service: Enlisted Signal Reserve Corps, Nov. 1917; commissioned 2nd Lieut., R.M.A. A.S.A., Nov. 1918; assigned flying instructor; completed bombing course at Ellington Field, Jan. 1919; assigned to photographic stage, March 1919.

Member: Aero Club of America.

Present Occupation: Aviation-Selling; (Pres. and Gen. Mgr., Aerial Sales Service, Inc.).

Address: 250 West 57 St.; home, Aero Club, 11 East 38th St., New York, N. Y.

Henry Stuart Hotchkiss

HOTCHKISS, HENRY STUART, Rubber Business; born, New Haven, Conn., Oct. 1, 1878; son of Henry L. Hotchkiss and Jane (Trowbridge) Hotchkiss; married, Elizabeth Wyndham Washington, Oct. 9, 1907.

Educated: Taft school; Phillips Academy, An-

dover; Ph.B. 1900, Yale, Sheffield Scientific School.

Professional: President, General Rubber Co. of Brazil; Director, General Rubber Co., Ltd., London; President, U. S. Rubber Plantations, Inc.; Malayan-American Plantations, Ltd.; Director, Holland-American Plantation Co.; President, Naugatuck Chemical Co.; Rubber Regenerating Co.; Vice President, L. Candee & Co.; Director, Rubber Regenerating Co., Ltd., Great Britain; Director, U. S. Rubber Export Co.; Director, New Haven Gas Light Co., New Haven Saw Mill Co., Chatham & Phenix National Bank, N. Y., Union and New Haven Trust Co., New Haven.

Aeronautical Activities: Assistant Chief, In-

England, April 1920 to July 1921; Naval Air Station, Lakehurst, N. J., July 1921 to date.

Flying Rating: Naval Aviator, June 1918.

War Service: U. S. Navy, July 1917 to Feb. 1922.

Present Occupation: Lieut., U. S. Navy.

Junius Henry Houghton

HOUGHTON, JUNIUS HENRY, Captain, Air Service; born, Titusville, Pa., Aug. 21, 1892; son of Clifford Houghton and Josephine (Harris) Houghton; married, Mary Hazel Hahn, Dec. 13,

Educated: Titusville High School; U. S. Military Academy.

Professional: Cadet, U.S.M.A., June 13, 1911 to Jan. 1912; 2nd Lt. Inf., Aug. 1912 to June 1916; to July 1917, Capt. Cav.; 1920 to date, Capt., Air Service.

Aeronautical Activities: Student Officer, Rockwell Field, Aug. 1917; in charge of Pursuit Training, Carlstrom and Dorr Fields, Aug. to March 1919; 1st Pursuit Group at Selfridge Field and Kelly Field, July to Oct. 1919; Commanding Officer, Scott Field since Oct. 1919.

Flying Rating: Junior Military Aviator.

Present Occupation: Commanding Officer, Scott Field.

Address: Belleville, Ill.; home, Titusville, Pa.

George Harrison Houston

HOUSTON, GEORGE H., Industrial Engineer; born, Covington, Ky., Jan. 4, 1883.

Educated: Public schools, Covington, Ky.; Cincinnati Technical School.

Professional: Member of firm of George W. Goethals & Co. Inc., specializing in industrial management, 1916 through 1920; Vice-President and General Manager, Curtiss Aeroplane & Motor Corporation 1916; Pres. Wright-Martin Aircraft Corporation, 1917-1919; Pres. Wright Aeronautical Corporation successor to Wright-Martin Aircraft Corporation, from date of organization to present time.

Aeronautical Activities: In 1919 was member of Aviation Mission appointed by Secretary of War to study aviation in several countries of Europe.

Member: Engineers' Club, Aero Club of America; Society of Automotive Engineers; American Society of Mechanical Engineers.

Present Occupation: Industrial Management.

Address: 60 Broadway, N. Y.; home, 270 West End Ave., New York City.

Clinton Wilbur Howard

HOWARD, CLINTON WILBUR, Major, Air Service; born, Brockton, Mass., Nov. 27, 1890; son of Ernest C. Howard and Ida P. Howard; married, Lois Alexander Pool, Sept. 10, 1918.

Educated: Public schools of Brockton, Mass.; Clark College; U. S. Military Academy.

Professional: 1915-1921, U. S. Army.

Aeronautical Activities: Attached Aviation Section Signal Corps, July 1916 to date.

Flying Rating: Junior Military Aviator, 1917.

Present Occupation: Student, Aero Engr., M.I.T.

Address: 155 Newbury St., Brockton, Mass.

Richard F. Hoyt

HOYT, RICHARD F., Banker; born, Revere, Mass., July 3, 1888; son of Charles Chase Hoyt and Emma Josephine Hoyt; married, Katherine Stone, Sept. 7, 1911.

Educated: Brookline grammar school; Volkman Preparatory School; A.B. 1910, Harvard University.

Professional: Hayden, Stone & Co., bankers.

Aeronautical Activities: 1918, Assistant to Colonel J. G. Vincent, Aeroplane Engineering Department, McCook Field, Dayton, Ohio; Secretary and Assistant to President, Wright-Martin Aircraft Corp., New Brunswick, N. J.; since Jan. 1921, Chairman of the Board, Wright Aeronautical Corp.

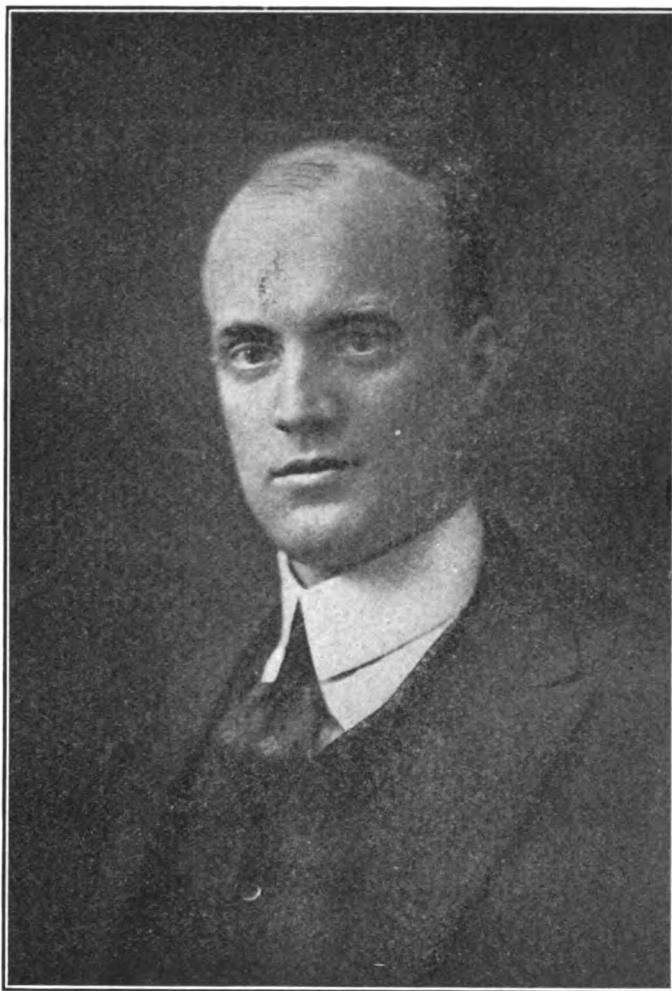
Member: Board of Governors, Aero Club of America.

Present Occupation: Partner, firm of Hayden, Stone & Co., bankers.

Address: 25 Broad St., New York City.

Thomas Henri Huff

HUFF, THOMAS HENRI, Aeronautical Engineer; born, Glassboro, N. J., June 22, 1892; son



George H. Houston

speciation, Equipment Division, Signal Corps, Oct. 25, 1917 to March 21, 1918; Chief, Raw Material Production, Air Service, Oct. 4, 1918 to Jan. 25, 1919.

War Service: Captain, Signal Corps, Oct. 25, 1917; Major, Signal Corps, Jan. 28, 1918; Lt. Colonel, Air Service, Oct. 4, 1918; Senior Assistant Military Attache, American Embassy, London; served in France.

Member: Lotos, University, Yale and St. Anthony Clubs, New York; Graduates Club, New Haven; Counselor, American Geographical Society, New York; Fellow, Royal Geographical Society, London.

Present Occupation: President, General Rubber Co.

Address: 1799 Broadway, New York City; home, 55 Hillhouse Ave., New Haven, Conn.

Arthur R. Houghton

HOUGHTON, ARTHUR R., Lieut., U. S. Navy; born, Falmouth, England, March 14, 1893; son of George Houghton and Agnes B. Houghton; married, Helen E. Brown, April 20, 1918.

Educated: Lancaster, Mass. High School; Boston English High School; Mass. Agricultural College, Amherst, Mass., 1915.

Professional: Instructor, public schools, Porto Rico, 1916.

Aeronautical Activities: Akron, Ohio, Oct. 1917 to Dec. 1917; Naval Air Station, Cape May, N. J., Jan. 1918 to April 1919; Naval Air Station, Chatham, Mass., May to July 1919; Naval Air Station, Rockaway, July 1919 to March 1920; Naval Rigid Airship Detachment (ZR2), Howden,



Thomas H. Huff

of Henri M. G. Huff and Mary R. Huff; married, Aline Lane, Nov. 17, 1917.

Educated: Episcopal Academy, Philadelphia, Pa.; University of Pennsylvania; S. B., Massachusetts Institute of Technology.

Professional: Sturtevant Aero Co. 1915; Instructor Massachusetts Institute of Technology 1915-16-17; Standard Aero Corp. 1917-18-19; Naval Aircraft Factory 1919-20; Huff Daland and Co. 1920-21.

Aeronautical Activities: Design and Construction of airplanes and seaplanes since 1917.

Present Occupation: President of Huff, Daland & Co.

Address: Adams Ave., Ogdensburg, N. Y.; home, 4 Greene St., Ogdensburg, N. Y.

William E. Huffman

HUFFMAN, WILLIAM E., Aeronautical Construction; born, Industry, Kans. July 19, 1891; son of William N. Huffman and Nora E. Huffman; married, Martha Schropp, May 10, 1919.

Educated: Public schools.

Aeronautical Activities: 1915-1916, Construction and flying spherical balloon; Dec. 1917 to June 1918, Flying Cadet; Instructor, Aerial Observation, June to Aug. 1918; Aeronautical Information Officer (U.S. Army), Aug. to Nov. 1918; Instructor, balloon maneuvering and construction, Nov. 1918 to April 1919; in charge of balloon hangar doing balloon and airship experimental work, April 1919 to April 1920; maneuvering officer and aerial observer, Philippine Islands (U.S. Army), April to Dec. 1920; Superintendent, Aero Construction, Dec. 1920 to date; Pilot, Spherical Balloon Race, July 1918, Ft. Omaha, Nebr.; Aide, Army and Navy Balloon Race, St. Louis, Sept. 1920.

Flying Rating: Spherical Balloon Pilot; Aerial Observer.

War Service: U.S. Army, Air Service, May 12, 1917 to Dec. 20, 1920.

Member: Airship Engineering Society.

Present Occupation: Superintendent, Aero Construction.

Address: McCook Field; home, 431 Bellevue Apt., Dayton, Ohio.

Edward Earle Hughes

HUGHES, EDWARD EARLE, Automobile Business; born, Florence, Ala., May 1, 1891; son of W. L. Hughes and Rachel V. Hughes.

Educated: Public schools; Electrical Engineering with G.C.S. Schools.

Professional: Six years in automobile business.

Aeronautical Activities: 1918, S.M.A., Austin, Tex.; training at Camp Dick, Rich Field, Brooks Field, and Kelly Field No. 2, 1918-1919; Gosport Flying Instructor.

Flying Rating: Gosport Flying Instructor, Brooks Field.

War Service: Air Service, Jan. 1918 to Jan. 1919.

Present Occupation: Service Manager, Hull-Dobbs Co.

Address: 600 Madison Ave.; home, 848 Poplar Ave., Memphis, Tenn.

Harry W. Huking

HUKING, HARRY W., Pilot, Air Mail Service; born, Congers, New York, May 33, 1896; son of Leonard J. Huking and Catherine E. Huking.

Educated: Public school 128, New York, N. Y.; Manual Training High School; Cooper Union Institute.

Professional: New York Life Insurance Co., 1912-1917.

Aeronautical Activities: Mineola, L. I., Aug. 1917; Princeton Ground School, Nov. 1917; Primary Training at Rich Field; commissioned 2nd Lieut., March 1918; Flying Instructor, Brooks Field, Kelly Field No. 2; advanced training at Rockwell Field; Supply Officer, East Field; pilot on border patrol with 9th Aero Squadron; pilot, Air Mail Service, April 1920 to date.

Flying Rating: Reserve Military Aviator.

War Service: Army, Aug. 1917 to Sept. 1919.

Present Occupation: Pilot, Air Mail Service.

Address: Hazelhurst Field, Hempstead, L. I.; home, 50 Beonhard St., Hempstead, L. I., N. Y.

Jerome C. Hunsaker

HUNSAKER, JEROME C., Commander, Construction Corps, U. S. Navy; born, Creston, Iowa, 1886; son of Walter J. Hunsaker and Alma L. (Clarke) Hunsaker.

Educated: Detroit and Saginaw, Mich., public schools; U. S. Naval Academy; M. S., Eng. D., Mass. Inst. of Tech.

Professional: 1904-1908 U. S. Naval Academy; 1908-1909 Midshipman at sea; 1909-1912, post graduate student of Naval Architecture, Mass. Inst. of Tech.; 1912, Asst. Shop Supt., Boston Navy Yard.

Aeronautical Activities: 1913, abroad studying Aerodynamics; 1914-1916, Mass. Inst. of Tech., Instructor in Aeronautical Engineering and Research in Aerodynamics. Introduced the application of the results of aerodynamic research in the design of American aircraft, first by translating and making available Eiffels' work and later by building the first wind tunnel at the Massachusetts Inst. of Tech. where original research was conducted and the results given to our builders and where groups of engineer graduate students were trained as aeronautical engineers. When

the U. S. entered the war, these aeronautic engineers were placed in charge of the technical services of both the Army and Navy as well as the air service A. E. F. While in charge of the aircraft division of the Bureau of Construction and Repair of the Navy Department had responsibility under the Chief Constructor's direction for the Naval aircraft program; designed the first modern airship produced in the United States, as well as the C & D class Navy airships; with Westervelt and Richardson designed the NC flying boats.

War Service: 1916-1921, in charge Aircraft Division, Bureau of Construction and Repair, Navy Dept.; Member, joint Army and Navy Technical Board 1917 to frame Aircraft Program; attached to Inter-allied Naval Armistice Commission 1918.

War Honors: Navy Cross.

Books: Translation of Eiffels' "Resistance of the Air"; "Stable Biplane Arrangements"; "Aerodynamic Properties of the Triplane"; "Aeroplane Stability".

Member: American Society Naval Architects and Marine Engineers; American Physical Society; Hon. Fellow, Royal Aeronautical Society of Great Britain; U. S. Naval Institute; Army and Navy Club.

Present Occupation: In charge Aircraft Division, Bureau of C and R, Navy Dept.

Address: Navy Department, Washington, D. C.; home, 3515 Lowell St., Washington, D. C.

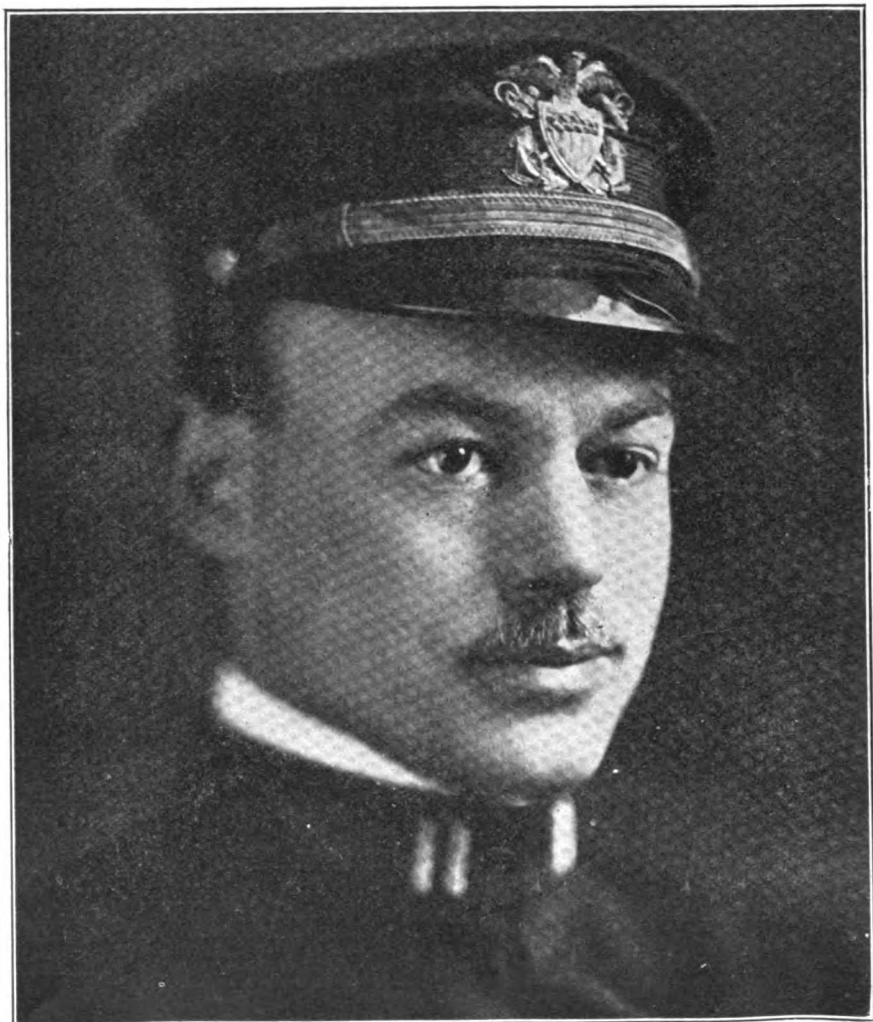
Franklin Livingston Hunt

HUNT, FRANKLIN LIVINGSTON, Physicist; born, Manchester, N. H., Sept. 3, 1883; son of Charles F. Hunt and Flora N. (Webber) Hunt.

Educated: Public schools of Waltham, Mass.; S. B. 1909, Ph.D. 1919, Mass. Inst. of Tech.; A.M. 1913, Harvard University; graduate student, University of Berlin, 1913-1914, University of Paris, 1919-1920, University of Cambridge, 1920.

Professional: Instructor in Physics, M.I.T., 1911-1913, 1915-1917; Physicist, Bureau of Standards, 1917 to date; representative, Bureau of Standards in Europe, 1919-1920; Chief, Aeronautic Instruments Section; Bureau of Standards, 1920 to date.

Aeronautical Activities: In charge of the in-



Jerome C. Hunsaker

investigation and development work of aircraft instruments at the Bureau of Standards.

Member: American Physical Society; Philosophical Society of Washington; Cosmos Club (Wash.).

Present Occupation: Chief, Aeronautic Instruments Section, Bureau of Standards.

Address: Bureau of Standards, Washington, D. C.; home, 19 Howard St., Waltham, Mass.

Harold M. Hunter

HUNTER, HAROLD M., Engineer; born, Fulton, N. Y., June 28, 1892; son of James C. Hunter and Martha E. Hunter.

Educated: Fulton High School; Andover Academy, Andover, Mass.; B.S. 1914, Yale Sheffield Scientific School.

Professional: 1914-1916, Manager, Viking Mfg. Co.; 1916-1917, Assistant Manager, Hunter Fan & Motor Co.; 1919-1921, Engineering work, Goodyear Tire & Rubber Co.

Aeronautical Activities: Cornell Ground School, Camp Dick, Taylor Field, Ellington Field, Oct. 1917 to Feb. 1919.

Flying Rating: Reserve Military Aviator.

War Service: Oct. 1917 to Feb. 1919, U. S. Army.

Present Occupation: Engineering work, Goodyear Tire & Rubber Co.

Address: 408 Pioneer St., Cincinnati, Ohio; home, 254 S. Fourth St., Fulton, N. Y.

W. Earnest Hunter

HUNTER, W. EARNEST, Commercial Aviation; born Oakland, Iowa Aug. 18, 1893; son of H. M. Hunter and Clara (McFadden) Hunter.

Educated: High School, Woodbine, Iowa; B.A., University of Iowa, 1917.

Professional: Taught in High School, Fall of 1917 and again in Fall of 1919.

Aeronautical Activities: U. S. S. M. A., Berkeley, Calif., Mar. 30, 1918 to Jan. 6, 1919; Rockwell Field and Mather Field, Mar. 19, 1920 to Oct. 1, 1920; Manager and Pilot for Bennett Aviation Co., Trinidad, Col.

Flying Rating: Reserve Military Aviator.

War Service: Nov. 15, 1917 to Nov. 11, 1918.

Address: 215 Masonic Temple, Denver, Col.; home, Woodbine, Iowa.

Howard Huntington

HUNTINGTON, HOWARD, Aeronautical Engineer; born, Flushing, L. I., N. Y., Dec. 13, 1885; son of Chester Huntington and Katherine H. (Smith) Huntington; married, Anna Erica Logan, Dec. 20, 1920.

Educated: Private schools in Flushing; 1899-1904, Chapin Collegiate Preparatory School, New York City, later called the Buckley School; B.A. 1908, New York University, Arts and Science, University Heights, Bronx.

Aeronautical Activities: 1908-1909, associated with Glenn H. Curtiss in Dr. Alexander Graham Bell's Aerial Experiment Association, assisting in designing and building the first airplane to fly in public; 1911-1912, designed and built novel airplane; 1914-1915, Huntington Aircraft Co., 1917-1919, Vice President, General Manager, and Chief Engineer of Southern Aircraft Co.; 1919-1920, President and Manager, Huntington Motor Co.

Member: Aero Club of America; American Society of Aeronautic Engineers.

Present Occupation: Aeronautical Research.

Address: 3016 N. W. First Ave., Miami, Fla.

Earl W. Hutchison

HUTCHISON, EARL W., Chemist; born, Buffalo, N. Y., Sept. 1, 1892; son of Robert Hutchison and Elsie (Bolza) Hutchison.

Educated: Northside High School, Pittsburgh, Pa.; B.S. 1916, University of Wisconsin.

Professional: Carnation Milk Co. until Aug. 18, 1917; Barber Colman Co., Rockford, Ill., Sept. 1919 to Jan. 1920, assistant to metallurgist and chief chemist.

Aeronautical Activities: Began training, April 1918 at Tours, France; Issoudun and St. Jean de Monts Gunnery Schools; 50th Squadron, Jan. to April 1919, 186th Squadron, April to July 1919.

Flying Rating: Reserve Military Aviator.

War Service: Aug. 1917 to Aug. 1919, U. S. Army Air Service.

Member: American Chemical Society.

Present Occupation: Chemist.

Address: 42nd St., Kedzie Ave., Chicago, Ill.; home, 218 Langley St., Pittsburgh, Pa.

William Albert Hyde

HYDE, WILLIAM ALBERT, Consulting Engineer; born, Wilmar Minn., Aug. 10, 1874; son of Albert A. Hyde and Ella R. (Hall) Hyde.

Educated: Hillhouse High School, New Haven, Conn.; Sheffield Scientific, Yale, Ph.B. 1901; Special, M.I.T., 1903-04; George Washington University, 1905-07; Harvard 1913-15.

Professional: Assistant in Physics Laboratory,

Sheffield Scientific, Yale, 1902-1903; Assistant in Electrical Engineering Laboratory, M.I.T., 1903-1904; Electrical Assistant at large, Signal Corps, Washington, D. C., 1905; Electrical Expert, Bureau of Ordnance, U.S.N., Washington, D. C., 1905-1914; President, Anchor Scale Co., Cambridge, Mass., 1914-1917.

Aeronautical Activities: Assigned in charge of photographic work at Mineola, March 15, 1918; Transferred to Science and Research Div., Signal Corps, May 15, 1918; Duty at Washington and Langley Field on Bombsights, Stabilization and Bomb Trajectories; O.I.C. Science and Research Laboratory, Langley Field, special work testing bomb sights and developing stabilized camera.

War Service: Priv. 1st Cl. Nov. 14, 1917; 2nd Lieut. A.S.S.C., Feb. 26, 1918; 1st Lieut. A.S.A.P., Oct. 27, 1915; Capt. AS-ORC, March 22, 1920.

Books: Navy Ordnance Pamphlets; No. 399 Flight of Projectiles, No. 422 Air Phenomena about Bullets in Flight.

Present Occupation: Consulting Engineer.

Address: 42 Church Street, New Haven, Conn.; home, North Haven, Conn.

John Jay Ide

IDE, JOHN JAY, Architect; born, Narragansett Pier, R. I.; son of Rear Admiral George E. Ide, U. S. N. and Alexandra L. (Bruen) Ide.

Educated: Browning School, New York; Certificate of Architecture, 1918, Columbia University; Ecole des Beaux Arts, Paris, France 1913-14.

Professional: Architect with H. T. Lindeberg, 2 West 47th St. N. Y. City 1916-17 and 1920-21.

Aeronautical Activities: Aviation Correspondent of Scientific American 1911-15 including duty as Special Aviation Correspondent in France 1913-14. Contributor to "Aviation" and other aeronautical periodicals; In charge Technical Information Section, Bureau of Construction and Repair (Aeronautics), Navy Department, 1917-20; Special aeronautical mission to Europe for Office of Naval Intelligence July-October 1920; appointed Technical Assistant in Europe, National Advisory Committee for Aeronautics, April 1921.

Navy Service: Ensign, Lieutenant (j. g.) and Lieutenant, U. S. Naval Reserve Flying Corps.

Member: Union Club, New York; Army and Navy Club, Chevy Chase Club, Washington, D. C.; Temp. Hon. Member: Royal Automobile Club, Royal Aero Club, Royal Air Force Club, London.

Present Occupation: Technical Assistant in Europe, National Advisory Committee for Aeronautics.

Address: Care Morgan Harjes and Co., Place Vendome, Paris, France.

John Fulton Irwin

IRWIN, JOHN FULTON, Designer and Consulting Aeronautical Engineer; born, Alameda, Calif., June 10, 1892; son of John Irwin and Harrie (Fulton) Irwin.

Educated: Public schools of San Francisco, Calif.

Professional: Aeronautical Engineer; designer, builder and operator of aircraft since 1907.

Aeronautical Activities: Designed, built and flew gliding machines in 1907; designed, built and flew engine plane in 1908, since that time has been designing, researching, experimenting, constructing and operating aircraft to date; in 1912 designed and built one of the first tractor biplanes in this country.

Present Occupation: Designer and Consulting Aeronautical Engineer.

Address: Irwin Aircraft Co.; home, 1233 J St., Sacramento, Calif.

Herbert Eugene Ives

IVES, HERBERT EUGENE, Physical Research Engineer; born, Philadelphia, Pa., July 31, 1882; son of Frederic Eugene Ives and Mary (Olmstead) Ives; married, Mabel Agnes Lorenz, Nov. 14, 1908.

Educated: Public schools of Philadelphia, Pa.; University College School, London, England; Rugby Lower School, Rugby, England; B.S. 1905, University of Pennsylvania; Ph.D. 1908, Johns Hopkins University.

Professional: Assistant Physicist, Bureau of Standards, 1908-1909; Physicist, National Electric Lamp Association, 1909-1912; United Gas Improvement Co., 1912-1918; Physical Research Engineer, Western Electric Co., 1919 to date; Consulting Engineer, Fairchild Aerial Camera Corp., 1919 to date.

Aeronautical Activities: Experiments on visual methods of detecting submarines from airplanes for National Research Council, 1917; Officer in Charge of photographic experimental work for U. S. Air Service, 1918-1919; personally made over 100 flights in testing and developing aerial photographic apparatus now used by U. S. Army and Navy; Liaison duty with A. E. F. July to Nov. 1918 in England, France, and Italy.

War Service: Captain, Air Service, Jan. 1918; Major, Air Service Reserve, June 1919.

Books: "Airplane Photography", 1920.

Member: American Physical Society; Ameri-

can Optical Society; American Astronomical Society; Cosmos Club (Wash.).

Present Occupation: Physical Research Engineer, Western Electric Co.

Address: 463 West St., New York City; home, 32 Laurel Place, Montclair, N. J.

Joy Gillian Jamison

JAMISON, JOY GILLIAN, Automobile Business; born, LaFayette, Ind., Aug. 27, 1890; son of Clarence F. Jamison and Anna B. Jamison; married, Ethel Jamison, Oct. 4, 1918.

Educated: Ford School, LaFayette, Ind.; LaFayette High School; Princeton Prep. School; Purdue University; 1912, Princeton University.

Professional: Automotive field; consulting and sales engineer.

Aeronautical Activities: S.M.A. Georgia School of Technology; Pilots' School, Princeton and University of Texas.

Flying Rating: Reserve Military Aviator, March 1918.

War Service: Army, Jan. 1918 to Jan. 1919.

Member: Army and Navy Club.

Present Occupation: District Sales Manager, Anderson Motor Co.

Address: Rock Hill, S. C.; home, 2104 N. Meridian St., Indianapolis, Ind.

Richard Stockton Jannopoulos

JANNOPOULO, RICHARD STOCKTON, Automobile Business; born, St. Louis, Mo., Oct. 23, 1895; son of John Christopher Jannopoulos and Berenice (Stockton) Jannopoulos.

Educated: Public schools of St. Louis; Kirkwood Military Academy; Culver Military Academy; Culver Summer Naval School.

Professional: Secretary and Director of Westcott Automobile Co.

Aeronautical Activities: Trained with R.F.C. in England as Pilot; as Observer in Tours, France; as Artillery Instructor in Observation; as observer over the front; with 91st Aero Squadron, 1st Army Observation Group.

Flying Rating: Observer, May 1918.

War Service: April 1917 to Feb. 1919; St. Mihiel and Argonne Offensives; Defensive Sector prior to St. Mihiel Drive; Officially credited with destruction of one enemy airplane.

Present Occupation: Automobile Business.

Address: 3227-3229 Locust St.; home, 4253 West Minister Place, St. Louis, Mo.

John Belmont Jaynes

JAYNES, JOHN BELMONT, Automobile business; born, Detroit, Mich., March 20, 1897; son of Thomas A. Y. Jaynes and Mary Jo Jaynes; married, Lucile Bransford, June 29, 1919.

Educated: Grammar school and high school; business college.

Professional: Automobile business until entering army.

Aeronautical Activities: Attended S. M. A., Austin, Tex. and took primary training at Ellington Field, receiving commission as 2nd Lieut., May 21, 1918; transferred to Camp Dick, Dallas, Tex.; C. O. Squadron B, Flying Officer's Wing; ordered to Langley Field, Hampton, Va.; completed course at Langley Field; completed course at Tallahassee Field; gunnery instructor; considerable flying in commercial planes since discharged.

Flying Rating: Reserve Military Aviator, May 21, 1918.

Member: Aero Club of America.

Present Occupation: Automobile business.

Address: 600 Commerce St.; home, 408 W. 10th St., Fort Worth, Tex.

Jefferson Davis Jermigin Jr.

JERMIGIN, JEFFERSON DAVIS JR., Chief Quartermaster, U. S. Naval Aviation; born, Commerce, Tex., June 14, 1898; son of Jefferson D. Jermigin and Zona Jermigin.

Educated: High school, Emory & Henry College, Emory, Va.

Aeronautical Activities: Ground School, Pensacola, Fla., April 1917, French Army School, Tours, France, Sept. 1917; French Naval School, Lake Hourtin, France, Sept. 1917; French Naval School, St. Raphael, France, Oct. 1917; 3rd Aviation Instruction Center, A. E. F., Issoudun, France, Dec. 1917-Jan. 1918; No. 2 Auxiliary School of Aerial Gunnery, R.F.C., Turnberry, Scotland, Feb. 1918; No. 1 School of Aerial Fighting, R.F.C., Ayr, Scotland, Mar. 1918; U. S. Naval Air Station, Dunkirk, France, April-June 1918; Instructor, U. S. Naval Air Station, Moutchic, France, July-Aug. 1918; Anti-Submarine Patrol, Fromantine, France, Sept. 1918; Anti-Submarine Patrol, U. S. Naval Air Station, Brest, France, Oct.-Nov. 1918; Aviation duty, U. S. S. Nevada, April-May 1919; Instructor and Tester, Naval Air Detachment, Langley Field, June-Aug. 1919; Commercial flying, Sept. 1919 to May 1920; Naval Air Station, Hampton Roads, Va., May 1920 to date.

Flying Rating: French Naval Brevet, No. 378; Naval Aviation Pilot Designation (No number, one of first issued).

Member: Aero Club of Texas.
Present Occupation: Chief Quartermaster, U. S. Naval Air Force.
Address: Naval Air Station, Hampton Roads, Va.; permanent, c/o 1st National Bank, Commerce, Tex.

Charles Theodore Jewell

JEWELL, CHARLES THEODORE, Commander (ret.) U. S. N.; born, Annapolis, Md., Feb. 26, 1872; son of Theodore Frelinghuysen Jewell and Elizabeth Lindsay (Poor) Jewell.

Educated: Coddington Grammar School; Rogers High School, Newport, R. I.; U. S. Naval Academy, Class of 1892.

Professional: Active Naval service until July 1, 1910, when was placed on retired list; remained inactive until March 2, 1917, when reported for duty at Naval Observatory; returned to inactive duty, Feb. 28, 1922.

Aeronautical Activities: While in charge of Navigational Instruments at Naval Observatory, had charge also of aerial navigational instruments; in May 1918, the Department of Aeronautical Instruments was formed and was placed in charge with no other duties.

Present Occupation: Duty at Naval Observatory.

Address: U. S. Naval Observatory, Washington, D. C.

Arthur Gottfred Johnson

JOHNSON, ARTHUR GOTTFRID, Farmer; born, Ludlow, Pa., April 8, 1898; son of Andrew J. Johnson and Hannah Johnson.

Educated: Public schools.

Professional: Farmer.

Aeronautical Activities: Ground School, Aug.-Oct. 1917; 3rd A.I.C., Nov. 1917 to Jan. 1918; Oct.-Dec. 1918, Ferry Pilot; Jan.-Feb. 1919, with American Committee to negotiate Peace at Paris.

Flying Rating: Reserve Military Aviator, May 1918; Brevet Superior, Aero Club d'Italia, No. 2661.

War Service: May 1917 to March 1919.

Member: Aero Club d'Italia; America Legion.

Present Occupation: Farmer.

Address: Box 36, Culbertson, Nebr.

C. Eugene Johnson

JOHNSON, C. EUGENE, Air mail pilot; born, Chicago, Ill., May 11, 1895; son of O. J. Johnson and A. J. Johnson.

Educated: Public Schools, Chicago, Ill.; Chicago College.

Professional: Traveling salesman, Brass Products, prior to war.

Aeronautical Activities: Primary training, Park Field; Instructor, Park Field; Gosport Training, Brooks Field; Instructor, Brooks Field; Instructor, Chief Instructor, Ass't O.I.C. Flying, O.I.C. Flying, Eberts Field; Arkansas Aviation Co., carried 3200 passengers, 1919-1920; Flying Supt. and Director Memphis Aerial Co., 1920; Air mail pilot 1921 to date.

Flying Rating: Reserve Military Aviator.

War Service: May 1917 to Aug. 1919.

Present Occupation: Air Mail Pilot.

Address: Reno, Nev.; home, 4418 N. Albany Ave., Chicago, Ill.

Davenport Johnson

JOHNSON, DAVENPORT, Major, Air Service; born, Tyler, Tex., March 28, 1890; son of Thomas A. Johnson and Amanda (Davenport) Johnson; married, Marion Craig, March 26, 1919.

Educated: Public schools of Tyler, Tex.; U. S. Military Academy, 1912.

Professional: Student until June 1912; 2nd Lieut., 19th Infantry; 1st Lieut., Infantry, July 1, 1916; Capt., Infantry, May 15, 1917; Maj. Infantry, July 1918; Lt. Col., Air Service, Aug. 1918.

Aeronautical Activities: Student, Feb. 1916 to Oct. 1916; Pilot's License, Aero Club of France, May 1917; graduate, A.S.S.C., San Diego, Calif.; C.O. 95th Squadron; C.O. 2nd Pursuit Group.

Flying Rating: Junior Military Aviator, Oct. 1916; Military Aviator, Oct. 1919; Pilot's License, Aero Club of America and Aero Club of France; Pilote Aviateur, France.

War Service: U. S. Army, April 6, 1917 to Nov. 11, 1918.

War Honors: French Croix de Guerre.

Member: Aero Club of America; Aero Club of France.

Present Occupation: Major, Air Service.

Address: Langley Field, Va.; home, Tyler, Tex.

Edward Albert Johnson

JOHNSON, EDWARD ALBERT, Commercial Aviation; born, Newport, R. I., Jan. 14, 1890; son of Christian Frederick Johnson and Alice (Anderson) Johnson; married, Lorraine Caroline Carrier, Dec. 18, 1916.

Educated: Public schools of San Francisco

and Oakland, Calif.; Business College of Sacramento, Calif.; Polytechnic College of Oakland, Calif.

Professional: 1909 to 1915, President and General Manager of Motor Express and Motor Drayage Co. of San Francisco.

Aeronautical Activities: Taught to fly at Curtiss School at Buffalo, N. Y., 1915; sent to England as Curtiss representative; received land instruction at Hendon, England; returned to United States in 1916 and appointed Chief instructor of Flying in Signal Corps, Sept. 1916; U. S. Air Service.

Flying Rating: Aero Club License No. 3276, Dec. 1918; Expert Certificate No. 215, Dec. 1918; Underwriters Laboratories License No. 1004.

War Service: Sept. 1916 to Dec. 1918, Chief Instructor, U. S. Army; Test Pilot, McCook Field, June to Dec. 1918; Air Mail, 1919.

Member: Aero Club of America.

Present Occupation: Johnson Airplane & Supply Co. of Dayton, Ohio.

Address: Wilmington Pike; home, 1024 Creighton Ave., Dayton, Ohio.



Byron Q. Jones

Frederick A. Johnson

JOHNSON, FREDERICK A., 1st Lieut., Air Service; born, Jolna, N. D., April 25, 1896; son of Chas. A. Johnson and Jane (Troxel) Johnson.

Educated: High school and college.

Flying Rating: Reserve Military Aviator; Airplane Pilot.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service.

Address: Payette, Idaho.

James M. Johnson

JOHNSON, JAMES, M., Commercial Aviation; born, Helena, Ark., July 19, 1885; son of James B. Johnson and Belle T. Johnson; married, Cornelia Spencer, June 25, 1912.

Educated: Public schools of Oberlin, Ohio; private school in Helena, Ark.; B.S. in Mechanical Engineering, 1907, Purdue University, Lafayette, Ind.

Aeronautical Activities: Learned to fly at Curtiss Aviation School, North Island, Calif., 1914-1915; instructor for Curtiss School at North Island, 1915-1916; instructor for Curtiss School, Newport News, Va., 1916-1917; test pilot for Government at Langley Field, June 1917 to Oct. 1917; test pilot, McCook Field, Oct. 1917-July 1920; test pilot, commercial aviation, Johnson Airplane and Supply Co., April 1921 to date.

Flying Rating: Aero Club of America Certificate No. 329, June 23, 1915; Aero Club of America Expert Aviators Certificate No. 78, March 21, 1917.

Present Occupation: Johnson Airplane and Supply Co.

Address: 1024 Creighton Ave.; home, 714 Creighton Ave., Dayton, Ohio.

Archibald Johnston

JOHNSTON, ARCHIBALD, Commercial Aviator; born, Pittsburgh, Pa., Dec. 29, 1891; son of Charles Marshall Johnston and Sara A. (Murphy) Johnston; married, Margaret Watson Richard, March 9, 1918.

Educated: Public schools of Pittsburgh, 1899-1905; Shadyside Academy, 1905-1910; A.B. 1914, Cornell University.

Professional: 1919-1920, General Manager, Johnston Aviation Co.; 1921, Sales Manager; Aero Import Corp.; 1922, Sales Manager, Huff Daland Aero Corp.

Aeronautical Activities: 1916-1917, Lafayette Escadrille, France; Dec. 1917, commissioned, Signal Corps, Regular Army U. S. Aviation Section; Officer in Charge, Combat and Aerial Gunnery School, Gerstner Field; 1918, Chief Instructor and Chief of Control Board, Carlstrom and Dorr Fields; 1918-1919, Wilbur Wright Field, Compiler and Author of U. S. Air Service Textbooks, Pilot's Gunnery and Combat Training; 1919-1920, Johnston Aviation Co., Pittsburgh, Pa.

Flying Rating: Pilote d'Avion, French Army, Nov. 1916; Pilot Aviator, Aero Club de France, Jan. 1917; Reserve Military Aviator, Dec. 1917; Airplane Pilot, 1920.

War Service: Section 3, American Ambulance Field Service, Lafayette Flying Corps, 1916-1917; U. S. Air Service, 1917-1919.

War Honors: Croix de Guerre; three citations.

Member: Aero Club of France; Aero Club of America; American Legion; French War Veterans Association.

Present Occupation: Sales Manager, Huff Daland Aero Corp.

Address: 1048 Commerce Bldg., Kansas City, Mo.; home, 3619 Wyandotte St., Kansas City, Mo.

Thomas Henry Johnston, Jr.

JOHNSTON, THOMAS HENRY, JR., Lumber Business; born, Birmingham, Ala., April 17, 1898; son of Thomas Henry Johnston, Sr. and Anne (Alexander) Johnston.

Educated: Central High School, Birmingham, Ala.; University of Alabama.

Professional: Lumber business since May 1919. **Aeronautical Activities:** Ground School, Atlanta, Ga.; preliminary training at Chateauroux, France; advanced training, 3rd A.I.C., Issoudun, France.

Flying Rating: French Brevet, Aug. 1918; Reserve Military Aviator, May, 1919.

War Service: Aug. 1917 to March 1919.

Present Occupation: Salesman and 2nd Vice President, American Lumber and Export Co.

Address: Box 1352, Birmingham, Ala.; home, 1826 S. 14th Ave., Birmingham, Ala.

Byron Quinby Jones

JONES, BYRON QUINBY, Major, Air Service; born, Henrietta, Monroe County, N. Y., April 9, 1888; son of Samuel Titus Jones and Sarah Minerva (Quinby) Jones; married, Evelyn Kennerly Clark, June 4, 1917.

Educated: Grammar School and High School; Freshman year Mass. Inst. of Technology; 1912, Graduate of U. S. Military Academy; Post Graduate Course in Aeronautical Engineering M. I. T.

Professional: Graduated from West Point 1912; served in 14th Cavalry to Nov. 1913; Ordered to Air Service Nov. 1913; Learned to fly in Signal Corps Aviation School, San Diego, Calif.; March and April, 1915, on duty at Brownsville, Texas, with Lieut. Milling, for the purpose of observing for the American forces at that place.

Aeronautical Activities: On duty with the First Aero Squadron in summer of 1915 and with detachment at Brownsville in Aug. and Sept. 1915; While on flying duty for Gen. Funston at Brownsville, Tex. the first record of any American army aviator having been fired on by the force of another country took place at that time; On duty in Boston, winter of 1915-1916, taking a course in aeronautical engineering; on duty in Washington in connection with aviation activities with Pershing's expedition 1916-1917; in charge of all airplane repair shops and theoretical course of aeronautical instruction at San Diego; June 1917 on duty in Washington on standardization of Army and Navy Air Service specifications; July to Sept. 1917; opened and organized the training school at Mt. Clemens, Michigan; Oct. 1917 on inspection about the country and Canada; Nov. 1917 made Chief of Air Service Training; April to middle of June 1918, on duty in England and France, in English, French, and American training centers; July to Dec. 1918 on duty in connection with the proving testing all aviation equipment; O. t. to Dec. directly in charge of the proving and testing at Wilbur Wright Field, Fairfield, Ohio; Dec. 1918 to May 1919 Engineering Representative in the Office of the Chief of Air Service; Sept. 1920, to date on duty as Assistant Chief of Supply Group.

Flying Rating: Junior Military Aviator 1914; Military 1917; Airplane Pilot, July 3, 1920; First American army pilot to deliberately "stall" an airplane, to "loop the loop" and do aerial acrobatics; First pilot of record to perform the "tail spin"; in 1915 established the world's record for endurance flight, pilot with two passengers, time, 7 hr., 5 min., in Burgess Tractor; in 1915 established an American record for endurance flight, pilot alone, time 8 hr., 53 min. in Martin Tractor; Awarded McKay Trophy in 1915 for aviation accomplishments.

Member: Army and Navy Club (Wash.).
Present Occupation: Ass't Chief of Supply Group, Office of Chief of Air Service.
Address: Munition Building; home, Army and Navy Club, Washington, D. C.

Delbert Emerick Jones

JONES, DELBERT EMERICK, 1st Lieut., Air Service; born, Boise, Idaho, Jan. 26, 1891; son of William Jones and Jennie G. Jones.
Educated: Public schools of Boise, Idaho, Stanton, Va., Medford, Ore., and Seattle, Wash.; Medford High School, Medford, Ore.
Aeronautical Activities: 1917, enlisted in Aviation Section Signal Corps at Vancouver, Wash.; at Rockwell Field until Sept. 10, 1917; Ground School, University of California, Nov. 29, 1917; reported back at Rockwell Field; completed flying training and was commissioned, Jan. 28, 1918; to France, Feb. 16, 1918.
Flying Rating: Reserve Military Aviator, Jan. 28, 1918; Airplane Pilot, Nov. 1920.
War Service: Thirteen months overseas with the 89th Aero Squadron.
Present Occupation: 1st Lieut., Air Service.
Address: 305 West Bannock St., Boise, Idaho.

Ernest La Rue Jones

JONES, ERNEST LA RUE, Aviation Information Expert; born, Haverstraw, N. Y., Aug. 14, 1883; son of Lavin P. Jones and Cordelia (Kile) Jones; married, Austine Vall, April 29, 1902.
Educated: Haverstraw High School; Eastman Business College.

Professional: Proprietor of hardware business; Connected with the aero and automobile shows of 1906 and 1907; assistant secretary, Aero Club of America, 1906-1907; established pioneer aeronautical journal "Aeronautics" in 1907 and conducted it until 1915; Sec. Aeronautical Congress of Jamestown Exposition, 1907, and collected the aeronautical exhibits for that exposition; founder member of the Aeronautical Society; founder member and was president of the Aeronautical Manufacturers Association during aero show in 1912; advertising and publicity manager for the Wright Co. and Wright-Martin Aircraft Corp. in 1916-1917; appeared on various occasions as expert in aeronautical litigation.

War Service: Volunteered for Air Service, 1917; commissioned 1st Lt., June 1917; organized information office which developed into present information Group of the Office Chief of Air Service; commissioned Capt., Oct. 24; overseas, Oct. 24, 1917; organized air information office which became finally Information Section, Air Service, A. E. F., May 11, 1918; in Argonne Offensive, Sept. 1918; Feb. 20, 1919, relieved as Chief Information Section, Air Service, A. E. F. for temporary duty in London; promoted to Major, Feb. 20, 1919; Chief Dissemination Division, Information Group, Office Chief of Air Service, Washington from May 1, 1919 to June 30, 1921; discharged from service, Nov. 30, 1920; on civilian status as aeronautical information expert to June 30, 1921.

War Honors: Medaille d'Honneur des Affaires Etrangères en Argent, French Government.
Present Occupation: Aeronautical Information Expert, Office Chief Air Service.
Address: Office Chief Air Service, Washington, D. C.

Ernest Lester Jones

JONES, ERNEST LESTER, Director, U. S. Coast and Geodetic Survey; born, East Orange, N. J., April 14, 1876; son of Charles H. Jones and Ada (Lester) Jones; married, Virginia Brent Fox, September 28, 1897.

Educated: Baldwin School, High School, Orange, N. J.; Newark Academy, N. J.; 1898, Princeton University, A.M., 1919.

Professional: Hydrographic and Geodetic Engineer.

Aeronautical Activities: Member of First Aerial Coastal Patrol Commission.

War Service: Major at beginning of World War, then commissioned Lt. Col., Regular Army; later, commissioned Colonel; saw active service in France and Italy.

War Honors: Made Officer Maurice and Lazzaro by King of Italy; recommended for Distinguished Service Medal; French Legion of Honor.

Hooks: Hypsometry, Elements of Chart Making and Surveying from the Air.

Member: American Society of Civil Engineers; Washington Society of Engineers; Washington Academy of Sciences; American Association for the Advancement of Science; Aero Club of America; Princeton University Engineering Association; Princeton Club of New York; Princeton Club of District of Columbia; National Press Club; Meteorological Association; Cosmos Club; Philosophical Society of Washington; Association of Seismologists; etc.; organized first American Legion Post; first commander, George Washington Post No. 1; President, Federal Club.

Present Occupation: Director, U. S. Coast and Geodetic Survey; Commissioner, International Boundary, United States-Alaska and Canada.
Address: 2116 Bancroft Place, Washington, D. C.

John Herbert Jones

JONES, JOHN HERBERT, Captain, Air Service; born, Andalusia, Ala., July 3, 1888; son of Morgan D. Jones and Melita M. Dozier Jones; married Nellie A. Lockard, Aug. 25, 1917.
Educated: Schools of Montgomery, Dadeville and Florala, Ala.; University of Alabama 1909 to 1914.

Professional: Power Plant work; Meridian Light and Ry. Co., Meridian, Miss. from April 1914 to Sept. 1915; Enlisted A. S. S. C. Regular Army, Oct. 1915, Station, San Diego, Calif.; Commissioned, Provisional 2d Lt. Infantry, March 19, 1917.

Aeronautical Activities: Ground School, Austin, Tex. Class 39; Began flying training, San Diego, Calif., April 1918; Qualified R. M. A. July 2, 1918; Engineer Officer, Rockwell Field Feb. to May 1919. Liberty Motor Course, Detroit, Mich., Sept. and Oct. 1918.

Flying Rating: Airplane Pilot.
War Service: Overseas with M. T. C. July-Nov. 1919.

Member: Aero Club of America; Rotary Club.
Present Occupation: Captain Air Service, U. S. A.

Address: Selfridge Field, Mt. Clemens, Mich.; home, 1503 25th Ave., Meridian, Miss.

Junius Wallace Jones

JONES, JUNIUS WALLACE, Major, Air Service; born, Jackson, La., April 3, 1890; son of Dr. P. H. Jones and Annabelle (Smith) Jones; married, Mary Beirne Harmon, Dec. 29, 1914.

Educated: 1907, Bingham School; 1907-1908, Louisiana State University; U. S. Military Academy, 1909-1913.

Professional: Served with Coast Artillery Corps from Sept. 1913 to June 1916; instructor, U. S. Military Academy from Sept. 1916 to June 1919; A. E. F., June to Nov. 1919.

Aeronautical Activities: Graduate, Air Service Pilot Training School, Carlstrom Field.

Member: Army Polo Association.
Present Occupation: Major, Air Service.
Address: Adjutant General, Washington, D. C.; home, 736 Convention St., Baton Rouge, La.

Lloyd T. Jones

JONES, LLOYD T., Prof. of Physics, University of California; born, Raymond, Ill., Feb. 1, 1887; son of Albert M. Jones and Etta C. Jones; married, Frida O. Strickland, Aug. 30, 1914.

Educated: Public schools of Raymond, Ill.; A. B. 1909, A. M. 1910, Lake Forest College; Ph.D. 1915, University of Illinois.

Professional: 1906-1908, General blacksmith and wagon maker with father; 1910-1915, Instructor in Physics, University of Illinois; 1915-1917 and 1919, Instructor in Physics, University of California.

Aeronautical Activities: May 1917, was sent by the War Department to the R. F. C. School at Toronto, returning to the University of California where he was one of the three founders of the School of Military Aeronautics at that institution. For eleven months he continued in charge of machine gun instruction at that school; April 1918, reported to Chief Signal Officer in Washington for duty and was assigned to Air Service Gunnery in charge of all ground school instruction in machine guns; placed on the list for flying instruction at Bolling Field under Lieuts. Lucas and Benjamin; promoted to Captain, Sept. 1918 and acted as executive officer of the Gunnery Branch; completed flying instruction at Mather and March Fields, 1919.

Flying Rating: Reserve Military Aviator; Pursuit Pilot.

War Service: Army Air Service, 1917-1919.
Member: American Legion.

Present Occupation: Professor of Physics, University of California.

Address: Univ. of Calif., Berkeley, Calif.

Russell G. Jones

JONES, RUSSELL G., Pilot, U. S. Air Mail; born, Van Wert, Ohio, March 21, 1885; son of William Bebb Jones and Ann (Alban) Jones.

Educated: Public schools of Van Wert, Ohio; Bachelor of Science in Electrical Engineering 1909, Case School of Applied Science.

Professional: 1909-1910, Hydraulic Engineer; 1911, Efficiency Engineer, Selby Shoe Co.; 1912-1916, Assistant Secretary and Accountant, Lumbermen's Mutual Casualty Co.; 1916-1917, Vice President and General Manager, Cruiser Motor Car Co.

Aeronautical Activities: Enlisted May 1917; commissioned 1st Lieut., Ellington Field, Jan. 1918; served as instructor in bombing school until July 1918; served overseas with 1st Handley-Page Night Bombing Unit from Aug. 1918 to Armistice; with Curtiss Aeroplane and Motor Co.,

July 1919 to June 1920; pilot with U. S. Air Mail from July 1920 to date.

Flying Rating: Reserve Military Aviator.
Present Occupation: Pilot, U. S. Air Mail.
Address: 296 E. 149th St., Cleveland, Ohio; home, 508 S. Washington St., Van Wert, Ohio.

Roy Messick Jones

JONES, ROY MESSICK, Major, Air Service; born, Annapolis, Md., Jan. 3, 1886; son of William Sneed Jones and Mary Elizabeth Jones; married, Sallie Collins, Nov. 3, 1916.

Educated: Annapolis public schools and high school; St. John's College, Bachelor of Science (Engineering) 1910.

Professional: Electrical Engineering before entering the army; commissioned Second Lieutenant, 22nd Infantry, November 30, 1912; promoted to First Lieutenant July 1, 1916; promoted to Captain of Infantry May 15, 1917; Major Signal Corps, September 29, 1917; Asst. Chief Executive Staff, Equipment Division, Sig. Cps. Jan. 15, 1918, Lt. Colonel Air Service, Aircraft Production, September 1918.

Aeronautical Activities: Detailed in Signal Corps from the Infantry, Oct. 1916; duty at Dept. Hdqrs., Southern Dept. until June 1917 then in Office, Chief Signal Officer, Washington, D. C.; Signal Corps Supply Div., Asst. Executive and Executive, Bureau of Aircraft Production, 1917-1918; Asst. Chief, Air Service Procurement, 1919-1920; Executive Officer, U. S. Army Balloon School, 1920-1921.

Flying Rating: Balloon Pilot; Balloon Observer.

War Service: Mexican Border, Naco Engagement, Dec. 1914, Agua Prieta, Oct.-Nov. 1915; on duty in War Dept., Washington, D. C. during World War.

Present Occupation: Chief of Air Service Procurement.

Address: Office Chief of Air Service, War Dept., Washington, D. C.

John Hamilton Jouett

JOUETT, JOHN HAMILTON, Major, Air Service; born, San Francisco, Calif., May 14, 1892; son of Cavalier Hamilton Jouett and Mary Wright (Hooper) Jouett; married, Fredrika Mason Kellogg, Feb. 1, 1919 in Toul, France.

Educated: Public Schools; Pennsylvania Military Academy; 1914, U. S. Military Academy, West Point, N. Y.

Professional: 2d Lieut. C. A. C. June 12, 1914 to July 1, 1916; 1st Lieut. C. A. C. to April 4, 1917; 1st Lieut. Aviation Section, Signal Corps to July 24, 1917; Major, Air Service to May 9, 1919; Lt. Col., Air Service to June 30, 1920.

Aeronautical Activities: Instructor U. S. Balloon School, Fort Omaha, Neb., April 1, 1917 to Sept. 15, 1917; Airship pilot R. A. F., May 1919; Director and Instructor Airship School, Langley Field, Va., July 1919 to Dec. 1920.

Flying Rating: Balloon Observer; Airship pilot; Junior Military Aviator.

War Service: A. E. F. C. O. Balloon Group IV Corps, July and Aug. 1918; C. O. Balloon Group V Corps, Sept. and Oct., 1918; C. O. Balloon Wing, 2d Army, Nov. 1918 to Feb. 1919.

Present Occupation: Major, Air Service.
Address: Brooks Field, Texas.

Henry Bourne Joy

JOY, HENRY BOURNE, Capitalist; born, Detroit, Mich., Nov. 23, 1864; son of James F. Joy and Mary (Bourne) Joy; married, Helen Hall Newberry, Oct. 11, 1892.

Educated: Orchard Lake Military Academy; 1883, Phillips Academy, Andover, Mass.; Sheffield Scientific School, Yale University.

Professional: Mining in Utah; railroad terminal construction work; freight car building; gasoline engine (Marine in 1893 and 1894); Chief Bostonsman's Mate in American Navy, Spanish War; Beet Sugar factory built in 1900, 1903, established Packard Motor Car Co. in Detroit, head of it until World War.

Aeronautical Activities: Beginning of World War, started Packard engineering work to develop air motor of "bogy" capacity.

War Service: Enlisted in Navy as Seaman in April 1898 (Spanish War), rated Chief Bosun's Mate; served throughout the war on U.S.S. Yosemite; in World War was commissioned Captain, Signal Corps, Regular Army; commissioned Lt. Col., Signal Corps, Regular Army; organized four motor mechanics regiments.

Member: Detroit Athletic Club; New York Yacht Club; Engineer's Club, N. Y.; Banker's Club, N. Y.; Larchmont Yacht Club.

Present Occupation: Capitalist.
Address: 1740 Penobscot Bldg., Detroit; home, 301 Lake Shore Road, Grosse Pointe Farms, Mich.

Temple N. Joyce

JOYCE, TEMPLE N., Commercial Aviator; born, Baltimore, Md., June 27, 1895; son of Harry Brewer Joyce and Orris (Howard) Joyce.
Educated: Baltimore Polytechnic Institute; Lehigh University.

Professional: Sales Engineer, Truscon Steel Co., 1915-1917; U. S. Representative, Societe Morane Saulnier, 1919-1921.

Aeronautical Activities: Commissioned 1st Lieut., Nov. 1917; training overseas, 1918; test pilot; asst. Chief Test Department, 1918-1919; Capt., Jan. 1919; holder of world's loop record, Jan. 16, 1919 (800 in 66 miles); Maryland State Aviation Commission, Nov. 1920.

Flying Rating: Reserve Military Aviator.

War Honors: Citation by Gen. Pershing, April 19, 1919 at Issoudun, France.

Member: Aero Club of America; American Flying Club of Baltimore.

Present Occupation: Representing Morane Saulnier.

Address: 709 Equitable Bldg.; home, 415 East 25th Street, Baltimore, Md.

Herbert Kellman

KELLMAN, HERBERT, Tree Expert; born, Barbados, B. W. I., June 17, 1895; son of Edward O'Donald Kellman and Amy (Douglas) Kellman.

Educated: Combermere School, Barbados, B. W. I.

Professional: Tree surgeon with Davey Tree Expert Co., Kent, Ohio, 1915 to 1917; with A. F. W. Vick Co., Philadelphia, 1919 to date.

Aeronautical Activities: Cadet, Royal Flying Corps, Sept. 1917 to June 1918; 2nd Lieut. Royal Air Force, July 1918 to June 1919.

Flying Rating: Airplane Pilot, July 1918.

War Service: Royal Flying Corps and Royal Air Force, Sept. 1917 to June 1919.

Member: Royal Aero Club, London, England.

Present Occupation: Tree expert.

Address: 709 Harrison Bldg.; home, 224 W. Rittenhouse St., Germantown, Philadelphia, Pa.

W. Wallace Kellett

KELLETT, W. WALLACE, Commercial Aviation; born, Boston, Mass., Dec. 20, 1891; son of W. Wallace Kellett and Frances Revere (Flegler) Kellett.

Educated: Chestnut Hill Academy; Princeton University.

Professional: Liquid Carbonic Co., 1913; B. F. Goodrich Rubber Co., 1914-1916.

Aeronautical Activities: Pilot French Air Service, 1918-1919; American Representative H. & M. Farman in U. S., 1919 to date.

Flying Rating: Brevet Militaire, 1918.

War Service: 1917 to 1918.

Present Occupation: American Representative, H. & M. Farman.

Address: Widener Bldg., Philadelphia, Pa.; home, Chestnut Hill, Pa.

Carlton W. Kendall

KENDALL, CARLTON W., Writer; born, Oakland, Calif., Aug. 17, 1895; son of Noah C. Kendall and Ena F. Kendall.

Educated: Oakland High School, 1914; three years, University of California.

Professional: Manager, Bay City Aero Supply Co., Oakland, Calif., 1909-1914; Pacific Coast Correspondent, Fly Magazine, 1912-1913; since 1913, contributor to Popular Mechanics, Scientific American and others; Secretary for the Kendall Investment Co. Inc. of Oakland, Calif.

Aeronautical Activities: Bay City Aero Supply Co., 1909-1914; U. S. Air Service, 1917-1918; carried on a series of experiments in longitudinal control for the government.

War Service: Enlisted in U. S. Air Service, Nov. 1917; commissioned 2nd Lieut. Sig. R. C., A. S., Jan. 1920.

Books: "The Truth About Korea", published by the Korean National Ass'n., 1919.

Member: Authors' League of America, Inc.

Present Occupation: Magazine writer.

Address: Room 79, Bacon Bldg.; home, 1410 Jackson St., Oakland, Calif.

Frank M. Kennedy

KENNEDY, FRANK M., Major, Air Service; born, Chicago, Ill., July 10, 1886; son of Craig C. Kennedy and Della L. Kennedy; married Ludie Pyrl Nelson, Sept. 22, 1911.

Educated: Schools of Hinckley, Ill.; high school graduate; B. S. C. E. 1908, University of Wisconsin.

Professional: Army officer from Sept. 1908; entered army immediately after leaving college; Sept. 1908 2d Lieut. 10th Infantry; June 1916, 1st Lieut. 10th Infantry; May 15, 1917, Capt. Infantry and Signal Corps; July 1st 1920, Major Air Service.

Aeronautical Activities: U. S. Army Aviation school, College Park, Md. Aug. 1911 to Oct. 1912; Balloon school Fort Omaha, Neb.; as student officer July 1917 to Oct. 1917 qualifying among the first 100 free balloon officers in United States; Officer in Charge of instruction at U. S. Army Balloon School at Fort Omaha, Neb.; July 1918 to Jan. 1919 in charge of all balloon observation work at Post Field in connection with the training

of officers at Artillery school of Fire at Fort Sill, Okla.; Jan. 1919 to May, training as airship pilot at Naval School at Navy Yard, Pensacola, Fla. graduating May 11; On duty at Washington, D. C., May 15, 1919 to date, in charge of all lighter-than-air Engineering and experimental work.

Flying Rating: Free Balloon Pilot; Airplane pilot; License No. 97 Airship pilot; Balloon Observer; rated Junior Military Aeronaut Oct. 16, 1917; Airship pilot, Oct. 1921.

War Service: Sept. 1908 2d Lieut. 10th Infantry; June 1916, 1st Lieut. 10th Infantry; May 15, 1917, Capt. Infantry and Signal Corps; July 1st 1920, Major Air Service.

Member: Army and Navy Club (Wash.).

Present Occupation: C.O., Scott Field.

Address: Scott Field, Belleville, Ill.; home, Hinckley, Ill.



Charles F. Kettering

Gayen Le Roy Kennedy

KENNEDY, GAYEN LEROY, Automobile Salesman; born, Wright City, Mo., Feb. 14, 1892; son of Gayen A. Kennedy and Emma (Hayes) Kennedy.

Educated: Public schools of Wright City, Mo. **Professional:** With American Car and Foundry Co., St. Louis, Mo., 1910-1912; Secretary, Georgia Auto and Supply Co., Savannah, Ga., 1919-1921.

Aeronautical Activities: Trained at S.M.A. Austin, Tex., Camp Dick, Carlstrom Field, Dorr Field, Barron Field, Gerstner Field.

Flying Rating: Reserve Military Aviator.

War Service: Army, Dec. 1917 to Jan. 1919.

Present Occupation: Retail automobile sales.

Address: 222 Drayton St.; home, 12 West Hull St., Savannah, Ga.

Robert E. Kennedy

KENNEDY, ROBERT E., Chief Mechanician; born, Pomona, Calif., Feb. 4, 1897; son of Michael C. Kennedy and Mary G. Kennedy.

Educated: High school and Pomona College, Pomona, Calif.

Aeronautical Activities: Army flying, March 1918 to Jan. 1919; flying for motion pictures; passenger flying in Texas.

Flying Rating: Reserve Military Aviator.

War Service: April 1917 to Jan. 1919.

Member: American Legion; Air Service Club of Southern California; F.R.S.; 4° K. of C.

Present Occupation: Government chief Mechanician.

Address: Box 224, Soldiers' Home; home, 307 No. Parke Ave., Pomona, Calif.

Cornelius J. Kenney

KENNEY, CORNELIUS J., 1st Lieut., Air Service; born, Brookline, Mass., Nov. 12, 1897; son of Michael Kenney and Julia Kenney.

Educated: Mechanic Arts High School; Northeastern Engineering School.

Aeronautical Activities: Cadet, Dec. 1917 to June 1918; 2nd Lieut., June 1918 to Sept. 1920; 1st Lieut., Sept. 1920 to July 1921.

Flying Rating: Airplane Pilot.

War Service: Army, Dec. 1917 to Nov. 1918. **Present Occupation:** 1st Lieut., Air Service. **Address:** Kelly Field, Tex.

George Churchill Kenney

KENNEY, GEORGE CHURCHILL, Captain, Air Service; born, Yarmouth, Nova Scotia, Aug. 6, 1889; son of Joseph Atwood Kenney and Louise (Churchill) Kenney; married, Hazel Dell Richardson, Oct. 16, 1920.

Educated: High school, Brookline, Mass.; 1911, Civil Engineering, Mass. Inst. of Tech.

Professional: Civil Engineer with Quebec & Saguenay Railroad, 1911-1912; Stone & Webster, Engineering Corp., 1913; President, Beaver Contracting & Engineering Corp., 1914-1917.

Aeronautical Activities: Cadet, Mass. Inst. of Tech. Ground School, 1917; Hazelhurst Field, L. I., 1917; advanced training at Issoudun, France, Dec. 1917 to Feb. 1918; at the front from May to Nov. 1918; credited with one enemy plane on Sept. 15, 1918 and another on Oct. 9, 1918; commissioned Captain, Air Service, March 1919; returned to U. S., July 19, 1919; Border Patrol duty, 1919-1920; Air Service Engineering School, McCook Field, Nov. 1920 to Sept. 1921.

Flying Rating: Reserve Military Aviator, Sept. 1917; Airplane Pilot.

War Service: June 1917 to end of war.

War Honors: Distinguished Service Cross, Nov. 1918; citation from General Pershing, March 1919.

Member: Aero Club of America; Archie Club of Boston.

Present Occupation: Captain, Air Service.

Address: Mitchel Field, L. I., N. Y.; home, 4 Egremont Road, Boston, Mass.

Grenville T. Keogh

KEOGH, GRENVILLE T., Automobile Business; born, New Rochelle, N. Y., Nov. 5, 1897; son of Martin J. Keogh and Katharine E. Keogh; married, Mary Pallin, Sept. 10, 1920.

Professional: Manager, Engine Department, Fairbanks, Morse & Co.; Trucking Department, Standard Oil Co.; Service Manager, Renault Automobile Co.; Service Manager, Hurlburt Truck Co.

Aeronautical Activities: 1200 hours in the air with the French Army; Test Pilot after the war for Standard Aircraft Corp.

Flying Rating: Pursuit Pilot.

War Service: Two years and three months in the French Army as Pursuit Pilot.

War Honors: Decorated four times with Croix de Guerre.

Member: Aero Club of America.

Present Occupation: Hurlburt Truck Co.

Address: 134th Street and 3rd Ave., New York City; home, 25 Neptune Road, New Rochelle, N. Y.

Richard C. Kerr

KERR, RICHARD C., Petroleum Geologist; born, Selma, Calif., July 23, 1896; son of William Henry Kerr and Annie (Stone) Kerr.

Educated: Grammar and high schools, Coalinga, Calif.; A. B. 1919, University of California.

Professional: Petroleum Geologist.

Aeronautical Activities: Ground school, Mass. Inst. of Tech., 1918; Instruction, U. S. N. Air Station, Pensacola, Fla.

Flying Rating: Naval Aviator. (Ensign).

War Service: U. S. Navy, Dec. 1917 to Jan. 1919.

Present Occupation: Petroleum Geologist.

Address: 2617 Durant Ave., Berkeley, Calif.

Stanley Porteus Kerr

KERR, STANLEY PORTESUS, Aviation Mechanician; Mitchel, Ont., July 6, 1895; son of Frank Kerr and Jennie (Holden) Kerr.

Educated: Brandon High School, Man.; Collegiate Brandon.

Professional: Automobile mechanic.

Aeronautical Activities: Enlisted as flying cadet R.A.F., July 1917; commissioned 2nd Lieut., Nov. 1917; in England, Nov. 1917 to March 1918; in France, April 1918; shot down, May 1918; discharged as 1st Lieut.; ran passenger carrying business, June 1919.

Flying Rating: F.A.I. pilot's license No. 6898.

War Service: July 23, 1917 to April 13, 1919.

Address: 221 2nd Street, Brandon, Man.

Floyd Bringhurst Keser

KESER, FLOYD BRINGHURST, Textile Manufacturer; born, Wyncote, Pa., Aug. 30, 1897; son of Harry J. Keser and Mary (Floyd) Keser.

Educated: Episcopal Academy, Phila., 1914; University of Pennsylvania, Set. 1914 to May 1917.

Aeronautical Activities: U.S.N.R.F.C., M.I. T. Co. 15; Naval Air Station, Akron, Ohio, lighter-than-air; Naval Air Station, Rockaway, convoy and patrol duty; convoy and patrol duty, Naval Air Station, Montauk, L. I.; Instructor, Naval Air Station, Pensacola, Fla.

Flying Rating: Naval Aviator (Dirigible).
Member: Philadelphia Country Club; Manufacturer's Club; Philadelphia Chamber of Commerce.
Present Occupation: Partner, Fay & Keser.
Address: Front and Clearfield Streets, Philadelphia, Pa.; home, Cynwyd, Pa.

Charles F. Kettering

KETTERING, CHARLES F., Engineer; born, Loudonville, Ashland County, Ohio, Aug. 29, 1876; son of Jacob Kettering and Martha (Hunter) Kettering; married, Olive Williams, Aug. 1, 1905.

Educated: Country District School, Loudonville, Ohio; high school, Wooster, Ohio; normal school and a graduate E.E. and M.E. of the Ohio State University, 1904.

Professional: 1909, invented the starting, lighting and ignition system known as the "Delco", manufactured by the Dayton Engineering Laboratories Co. of which he was an organizer and subsequently elected President, which position he still holds; 1916, perfected and marketed the house-lighting plant and other products known as "Delco-Light", manufactured by the Delco-Light Co. of which he is Vice-President; Vice President of the Dayton-Wright Airplane Co.; President of the General Motors Research Corp. and recently elected Vice President and Director of the holding company, the General Motors Corp.

Aeronautical Activities: Inventor of the ignition equipment used on the Liberty Motor and has also contributed in many ways to the electrical and mechanical improvements in aeronautical work; his daily flights in his personal airplane enable him to obtain valuable first hand knowledge of the problems involved in flying which could not be obtained otherwise.

Member: Society of Automotive Engineers; American Society of Mechanical Engineers; American Institute of Electrical Engineers; Army and Navy Club.

Present Occupation: President, General Motors Research Corp.

Address: Dayton, Ohio.

Clement Melville Keys

KEYS, CLEMENT MELVILLE, Banker and Broker; born, Chataworth, Ont., Canada, April 7, 1876; son of George Keys and Jessie Margaret (Evans) Keys; married, Florence E. Hays, June 15, 1905.

Educated: Lindsay (Ontario) High School; B. A. 1897, Toronto University.

Professional: Teacher of Classics, Ridley College, St. Catherine's, Ontario, 1898-1900; Railroad Editor "Wall Street Journal" 1903; Financial Editor "World's Work" 1906-1911; Banker and Broker; Corporation Financial Advisor; Vice President, Curtiss Aeroplane and Motor Corp., 1916; President, Curtiss Aeroplane and Motor Corporation, 1920.

Aeronautical Activities: President, Curtiss Aeroplane and Motor Corporation.

Member: Banker's Club; National Arts Club; Sleepy Hollow Country Club; Glen Ridge Country Club; Nutley Field Club; Hudson River Country Club.

Present Occupation: President, Curtiss Aeroplane and Motor Corporation.

Address: 60 Broadway, New York; home, 353 Ridgewood Avenue, Glen Ridge, N. J.

Conrad Roy Keys

KEYS, CONRAD ROY, Aeronautical Industry; born, Clarksburg, Ontario, Canada, June 7, 1893; son of George Keys and Jessie Margaret Keys.

Educated: Public schools of Clarksburg and Orangeville, Ontario; Bachelor of Applied Science, Electrical Engineering, University of Toronto, Canada, 1915.

Aeronautical Activities: Clerk to Production Manager, Curtiss Aeroplanes & Motors Ltd., Toronto, April 1915 to April 1917; Factory Manager, Curtiss Aeroplane & Motor Corp., Buffalo, April 1917 to Feb. 1919; Production Manager, Curtiss Engineering Corp., Garden City, Feb. 1919 to Jan. 1920; Industrial Executive, 1920; Assistant to the President, Curtiss Aeroplane & Motor Corp., Aug. 1920 to Aug. 1921.

Present Occupation: Vice President and Manager, Curtiss Aeroplane & Motor Corp.

Address: Garden City; home, 66 Hardenbrook Ave., Jamaica, L. I., N. Y.

Walter Glenn Kilner

KILNER, WALTER GLENN, Major, Air Service, U. S. Army; born, Shelby, N. Y.; July 8, 1888; son of Charles W. Kilner and Mary Elizabeth (Blocher) Kilner; married, Grace Covel, Dec. 4, 1916.

Educated: Syracuse public and high schools; U. S. Military Academy, New York.

Professional: U. S. Army Officer.

Aeronautical Activities: On continuous flying

duty since Nov. 1914; served with 1st Aero Squadron in Mexico with Mexican Punitive Expedition; Commanding Officer, Mineola, L. I., N. Y.; ordered to A. E. F., Oct. 1917; organized and operated 3d A.I.C., Issoudon, France; Chief of all Air Service Training, A. E. F.

Flying Rating: J. M. A., 1915; M. A., 1918; Airplane Pilot, 1920.

War Service: Army, Commanding Officer, Mineola, L. I., N. Y.; served in Air Service in all commissioned grades to include Colonel.

War Honors: Awarded Distinguished Service Medal by United States; Order of St. Michael and St. George (England); Officer of the Legion of Honor (France).

Books: "Cantonment Manual."

Member: Army and Navy Club (Wash.); Aero Club of America.

Address: Air Service, Washington, D. C.; home, Army and Navy Club, Washington, D. C.



Clement M. Keys

Edwin Foster Kingsbury

KINGSBURY, EDWIN FOSTER, Physicist; born, Hamilton, N. Y., Dec. 24, 1886; son of Edwin L. Kingsbury and Sarah (Foster) Kingsbury; married, Caroline Ellen Woodcock, June 29, 1912.

Educated: Public schools of Hamilton, N. Y.; Colgate Academy; B. S. 1910, Colgate University.

Professional: Physicist, United Gas Improvement Co., 1910-1918; Eastman Kodak Co., 1919-1920; Western Electric Co., 1920.

Aeronautical Activities: 1st Lieut., Photographic Section, Bureau of Aircraft Production, U. S. A., Feb. 1918 to Oct. 1918; Captain, Oct. 1918 to April 1919; Major, Air Service Reserve, May 1919.

War Service: As above.

Member: American Physical Society; Franklin Institute of Philadelphia.

Present Occupation: Physicist, Western Electric Co.

Address: 463 West St., New York City; home, 59 Beech St., Rutherford, N. J.

Guy Kirksey

KIRKSEY, GUY, 1st Lieut., Air Service; born, Dallas, Tex., Aug. 2, 1886; son of John G. Kirksey and Mozelle (Perry) Kirksey; married, Hallie Overall Keys, May 26, 1921.

Educated: Grade schools; high school; LL.B. 1914, University of Missouri.

Professional: Lawyer, 1915-1917.

Aeronautical Activities: Cadet, Dec. 1917; commissioned 2nd Lieut., Air Service, Aug. 1918; instructor of flying, Brooks Field, Aug. and Sept. 1918; flying instructor, Park Field, Oct. 1918 to March 1919; Flight Commander, Carlstrom Field, March 1919 to Jan. 1921; at present, Pilot Martin Bomber, Langley Field, Va.

Flying Rating: Reserve Military Aviator, Aug. 1918; Airplane Pilot, 1920.

War Service: As above; all war service in U. S.

Present Occupation: 1st Lieut., Air Service.

Address: Bolling Field, Washington, D. C.

Roy Carrington Kirtland

KIRTLAND, ROY CARRINGTON, Lt. Col., Air Service; born, Fort Benton, Mont., May 14, 1874; son of Thaddeus Sandford Kirtland and Ann Virginia (Carter) Kirtland; married, Helen Parker, Nov. 3, 1913.

Educated: Public schools, Denver, Colo., and Washington, D. C.

Professional: U. S. Army since Nov. 1898.

Aeronautical Activities: Detailed on Aeronautical duty with Signal Corps, March 1911; in charge College Park Aviation Field, April to June 1911; Assistant Instructor in Flying, S. C. Aviation School, Dec. 1912 to July 1913; Commanding 1st Aero Squadron, June to Nov. 1913; Adjutant Supply Officer, Disbursing Officer and Quartermaster, S. C. Aviation School, Dec. 1913 to April 1915.

Flying Rating: Pilot license No. 45, Aug. 1911; Expert Aviator, license No. 11, Aero Club of America; Military Aviator, Jan. 1913; Junior Military Aviator, July 1914.

War Service: On duty at Kelly Field; commanding Tallaferro Field; on organization duty Washington, Camp Hancock, and Camp Greene, from Sept. 1917 to June 1918; commanded and took over to France the Third Reg. Motor Mechanics, landed at Brest July 5; on duty in England as Inspector of the York-Lincoln Area and in command of Air Service Rest Camp, August to October; Student officer in Army Schools, Langres, France from October 27 to December 11 when returned to U. S.; since that time has served in Supply Division of the Air Service, commanding the General Supply Depots of Middletown, Pa. and Rockwell Field; at present, Student, Officer Army General Staff School.

War Honors: Letter of commendation from Chief of Air Service for work in connection with organization of Motor Mechanics Regiments.

Member: Aero Club of America; Army and Navy Club (Wash.).

Present Occupation: Lt. Col., Air Service.

Address: Ft. Leavenworth, Kans.

Daniel Kiser

KISER, DANIEL, Mail Pilot; born, Chicago, Ill., Nov. 19, 1894; son of John D. Kiser and Ina M. Kiser.

Educated: St. James Grammar and High School.

Professional: Experimental airplane Construction, 1910-1916, monoplanes, biplanes, tandems, quadruplanes, and motors of all types.

Aeronautical Activities: 1916-1917, exhibition work; Curtiss type pusher; U. S. Army flying instructor, April 1917 to Dec. 1918; Jan. 1918-Jan. 1921, exhibition and passenger work in Central and Southern states; Jan. 1921 to date, pilot, U. S. Air Mail.

Flying Rating: F.A.I. Certificate No. 2346; F.A.I. Expert Certificate No. 193.

War Service: Civilian flying instructor; one of the first three night flying instructors in the United States.

Present Occupation: Pilot, U. S. Air Mail.

Address: Air Mail Station, Maywood, Ill.; home, 5820 So. Park Ave., Chicago, Ill.

James H. Knight

KNIGHT, JAMES H., Air Mail Pilot; born, Lincoln, Kans., March 14, 1892; son of Dr. M. M. Knight and Emma S. Knight; married, Lois Warnock Hoag, Aug. 18, 1919.

Educated: Buchanan public schools; Michigan State College, Mechanical Engineer.

Professional: Mechanical Engineer with Contracting Engineers, 1914-1916; 1916-1919, Lieutenant in U. S. Army Air Service; 1919 to date, Pilot, flying for U. S. Air Mail Service.

Aeronautical Activities: 1916-1919, U. S. Army Air Service; commercial flying, Ed. Stinson Aircraft Co. and U. S. Air Mail Service, 1919 to date. (Speed records and transcontinental night flight, Cheyenne to Chicago, Feb. 1921.)

Flying Rating: Reserve Military Aviator, Aug. 1918; Aero Club of America License No. 2052.

War Service: As above.

Member: Aero Club of America; Aero Club of Cleveland.

Present Occupation: Air Mail Pilot.

Address: Ak-Sar-Ben Field; home, 709 S. 18th St., Omaha, Nebr.

James Knowles, Jr.

KNOWLES, JAMES, JR., Manufacturing; born, Cincinnati, Ohio, Dec. 27, 1896; son of James Knowles, Sr. and Laura Knowles.

Educated: Peabody Grammar School, Cambridge, Mass.; Andover School; Volkman School,

Boston, Mass.; A. B. 1919, Harvard University.
Professional: United Drug Co., 1919 to date.
Aeronautical Activities: Ground School, Columbus, Ohio; in training at Tours, France, Aug. to Oct., 1917; Issoudun and Cazaux, France, Oct. to Feb. 1918; in Chateau Thierry, St. Mihiel and Meuse-Argonne Offensives with the 95th Aero Squadron.

Flying Rating: R. M. A.
War Honors: Croix de Guerre with Palm; Distinguished Service Cross; Citation, Sept. 11, 1918; Aero Club of America; Medal.
Present Occupation: United Drug Co. sales department.

Address: 63 Leon St., Boston, Mass.; home 51 Brattle St., Cambridge, Mass.

Esten B. Koger

KOGER, ESTEN B., Commercial Aviator; born, Decatur City, Iowa, May 21, 1881; son of George Bluford Koger and Ettie (Smith) Koger.

Educated: Hickory Grove School; Decatur City High School; University of California, 1917; Massachusetts Institute of Technology 1918, special course.

Professional: Ranching, Oklahoma and Texas, 1895-1900; with Houston and Texas Central Railway Co., 1901-1903; E. R. Thomas Motor Car Co., 1904-1906; Elmore Motor Car Co., 1906-1907; E. R. Thomas Motor Car Co., special representative to Japan, China, and Philippines, 1908-1909; Sales Department, Oakland Motor Car Co., 1910-1912; sales engineer, Master Carburetor Corp., for United States; Canada and Cuba, 1913-1916.

Aeronautical Activities: Border duty, El Paso, Tex., with 7th Division, Pennsylvania National Guard, 1916; entered Aviation Section, Signal Corps, Nov. 1916; trained at Curtiss Aviation School, Newport News, Va., 1917; aeronautical course at University of California; Bureau of Military Aeronautics and Bureau of Standards, Washington, D. C.; transferred to U. S. Navy, Bureau Engineering, Division of Aeronautics, Experimental Department, Oct. 1917; member of Naval Trial Board, for aircraft acceptance; on duty at various fields and on June 9, 1918 while on duty at Hampton Roads, Va., sighted and dropped a bomb on German submarine.

Flying Rating: F.A.I. No. 244, July 1917; Naval Aviator Certificate No. 649, June 1918.

War Service: As above.
Member: Society of Automotive Engineers; National Geographic Society, Washington, D. C.; University Club, Washington, D. C.; Elks Club No. 99, Los Angeles, Calif.

Present Occupation: Purchasing Agent and Inspector, Davis-Douglas Co.
Address: 515 S. Alexandria Ave., Los Angeles, Calif.

Herman Theodore Kraft

KRAFT, HERMAN THEODORE, Aeronautical Engineer; born, Akron, Ohio, April 11, 1888; son of Theodore Kraft and Sophia (Minsterman) Kraft; married, Frances Steiner, Feb. 2, 1915.

Educated: St. Bernards and Sacred Heart Academy.

Professional: With Kraft Knitting Co., 1905 to 1913; with Goodyear Tire & Rubber Co., June 1914 to date.

Aeronautical Activities: Test Pilot for Goodyear Tire & Rubber Co. on airships built for Army

and Navy; proposed the Pony Blimp; Asst. Aero Engineer to Ralph Upson from May 1917 to Nov. 1920; Chief Aero Engineer for Goodyear Tire & Rubber Co., 1920 to date.

Flying Rating: Dirigible Pilot, Aero Club Certificate No. 37.

War Service: Civilian Engineer, U. S. Army sent to France and England to study design of lighter-than aircraft; Oct. 1917 to March 1918.

Member: Treas., Akron Flying Club.

Present Occupation: Chief Aero Engineer, Goodyear Tire & Rubber Co.

Address: E. Market St.; home, 181 W. Butchell Ave., Akron, Ohio.

Arnold Norman Krogstad

KROGSTAD, ARNOLD NORMAN, Major, Air Service; born, Lanesboro, Minn., Aug. 28, 1885; son of Christoffer O. Krogstad and Nina B. (Nelson) Krogstad; married, Julia LeGrand Rozelle, Oct. 6, 1917.

Educated: High School, Lanesboro, Minn.; Graduated, 1909, U. S. Military Academy.

Professional: 2d. Lieut., 1st. Lieut., and Captain, U. S. Infantry.

Aeronautical Activities: Aviation Student at Signal Corps Aviation School, San Diego, Calif. Oct. 1916 to May 1917; Officer of the U. S. Air Service to date.

Flying Rating: Junior Military Aviator 1917; Airplane Pilot 1920; Aero Club of America, pilot license 1917 No. 704.

War Service: Organized and Commanded Ground School at University of Calif., and Rich Field at Waco, Texas 1917 and 1918; Three months overseas as Liaison officer, 1918; 1918, Operations Div. Air Service; C.O., Eberts Field, Jan.-Dec. 1919; C.O., Aviation Gen. Supply Depot, Morrison, Va., Jan. 1920-Sept. 1921; Air Officer, 2nd Corps Area, Sept. 1921 to date.

Member: U. S. Infantry Association; Army and Navy Air Service Association; Aero Club of America; Army and Navy Club, N. Y.

Present Occupation: Air Officer, 2nd Corps Area.

Address: Governors Island, N. Y.

Harold Albert Kullberg

KULLBERG, HAROLD ALBERT, Sales Engineer; born, Somerville, Mass., Sept. 10, 1896; son of Charles A. Kullberg and Hilda Kullberg.

Educated: Grammar school; high school; technical school; 1917, Wentworth Institute, Boston, Mass.

Professional: Sales Engineer.

Aeronautical Activities: Trained in Canada, Texas, England and France; civilian flying near Boston.

Flying Rating: Lt., Royal Flying Corps, F.A.I. No. 7247; R.F.C. No. 10982.

War Service: Aug. 1917 to July 1919; Royal Flying Corps and Royal Air Force.

War Honors: Distinguished Flying Cross, Sept. 1918.

Member: Massachusetts Aero Club.

Present Occupation: Sales engineer.

Address: 20 Central Road, Somerville, Mass.

Frank Dorwin Lackland

LACKLAND, FRANK DORWIN, Major, Air Service; born, Farquier County, Va., Sept. 13, 1884; son of Samuel Lackland and Katharine Lackland.

Educated: Public schools of Virginia and Washington, D. C.

Professional: Law Office; Army Officer since 1910; Graduate Air Service Engineering School 1920-21.

Aeronautical Activities: Exec. Officer and Commanding Officer, Trades Division, Kelly Field, 1917-1918; Exec. Officer, School Director and C. O. of School of Aerial Gunnery, Selfridge Field, April 1918 to Jan. 1919; C.O., Langley Field, Jan. to June 1919; C.O., 166th Squadron Day Bombardment, Ellington Field and Kelly Field to Oct. 1919; C.O. Aviation Repair Depot, Montgomery, Ala., Dec. 1919 to Oct. 1920; A.S. Eng. School, Nov. 1920 to Sept. 1921; Air Officer, 8th Corps Area since Sept. 1921.

Flying Rating: J.M.A.; Airplane Pilot.

Present Occupation: Major, Air Service.

Address: Ft. Sam Houston, Tex.

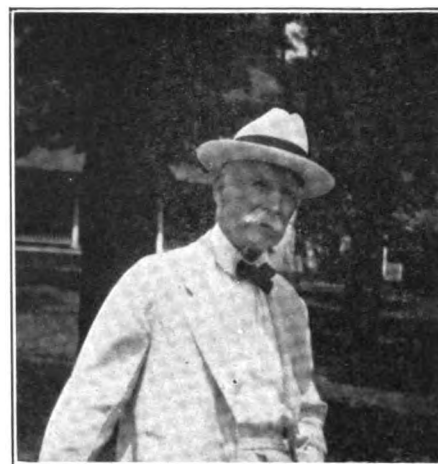
Fiorello H. La Guardia

LA GUARDIA, FIORELLO H., Lawyer; born New York City, Dec. 11, 1882; Son of Achilles and Irene La Guardia.

Educated: public schools, Prescott Arizona, L. L. B. New York University.

Professional: Practiced law in New York City; deputy attorney general, State of New York, 1915-1917; Member of Congress, 65th and 66th Congresses, President, Board of Aldermen, New York City.

Aeronautical Activities: First took up flying, Mineola, Sept. 1915—Bollanca Monoplane; 8th Aviation Instruction Center, A. E. F.; American Bombing Detachment, Italian Front.



Frank S. Lahm

Flying Rating: R. M. A. War Service. Major, Air Service.

War Honors: War Cross (Italian); one citation, Gen. Diaz; Knight Commander, Italian Crown.

Member: New York Athletic Club, American Flying, Many civic and political organizations.

Present Occupation: President, Board of Aldermen, New York City.

Address: New York City.

Frank S. Lahm

LAHM, FRANK S., Retired; born, Canton, Ohio, April 25, 1846; son of Samuel Lahm and Almira Webster (Brown) Lahm; married, Adelaide Way Purdy, March 1875.

Educated: Public schools of Canton, Ohio.

Professional: First exclusive dealer of American writing machines on the continent of Europe (1884).

Aeronautical Activities: First American to take up ballooning as a sport; first person to give a full account of what the Wright Brothers had accomplished, 1905; Nov. 1908, flight in aeroplane with Wilbur Wright at Le Mans; member of the Governing Committee of the Aero Club of France since 1906; member of the Aero Club of America since formation; 1907, founded the Aero Club of Ohio; American Vice President of the International Aeronautical Federation; Dean of balloon pilots of the Aero Club of France.

War Service: One and a half year's service during the war in the Lighter-than-Air branch in Washington, D. C.

War Honors: Decorated with Palmes académiques by the Minister of War of France.

Address: 13 rue Saint-Florentin, Paris, France.

Frank P. Lahm

LAHM, FRANK P., Lieut. Col., Air Service; born, Mansfield, Ohio, Nov. 17, 1877; married, Gertrude Jenner, Oct. 18, 1911.

Educated: Public Schools, Mansfield, Ohio; Ecole Albert le Grand, Paris, France; Michigan Military Academy; U. S. Military Academy.

Professional: Army Officer all grades to Colonel.

Aeronautical Activities: France, Sept. 30 to Oct. 1, 1906, winner 1st Gordon Bennett Balloon Race, Paris; In charge Wright tests, Ft. Myer, Va. 1908, 1909; winner National Balloon Race, St. Louis, July 1911; Organized Army Air Service in Philippine Islands 1912.

Flying Rating: Military Aviator (War Dept.); Aero Club of America, License, No. 3, Spherical Balloon Pilot, License No. 2, Dirigible Balloon Pilot, Aviator's Certificate, No. 2; Expert Aviator's Certificate, No. 15.

War Service: Hdq. A. E. F. and Hdq. A. S. Zone of Advance Oct. 1, 1917 to July 26, 1918; On duty Hdq. 1st Army, A.E.F., July 26, 1918 to Oct. 12, 1918; Oct. 12, 1918 to Apr. 1919, Commanded Air Service, 2nd Army, A.E.F.

Member: Honorary Member, Aero Club of America; Life Member, Aero Club de France; American Legion; various Clubs.

Present Occupation: Air Service Representative, War Dept.

Address: War Dept., Washington, D. C.; home, 1829 23rd St. N. W., Washington, D. C.

William Alexander Laird

LAIRD, WILLIAM ALEXANDER, Airplane Manufacturer; born, Chicago, Ill., March 18, 1891; son of Matthew A. Laird and Clara Louise Laird; married, Rose L. Pfan, Dec. 25, 1911.



Fiorello H. La Guardia

Professional: Woodworker and cabinet maker, 1910-1913; building, overhaul and repair of internal combustion engines, 1913-1918.

Aeronautical Activities: Helped build first Laird Scout, Model S, with E. M. Laird Co., 1919; designing experimental aircraft for Ostergaard Aircraft Works, 1919 to date.

Present Occupation: Airplane construction.
Address: Ostergaard Aircraft Works, 4269 Narragansett Ave.; home, 6706 S. Peoria Street, Chicago, Ill.

Albert Bond Lambert

LAMBERT, ALBERT BOND, Manufacturer, born, St. Louis, Mo., 1875; son of Jordon W. Lambert and Lily (Winn) Lambert; married, Myrtle McGrew, 1898.

Educated: 1895 University of Virginia.
Professional: Pres. Lambert Pharmacal Co.; vice-President, Lambert Deacon Hull Printing Co.; Heath Mfg. Co.; President, Paint, Oil & Drug Co.
Aeronautical Activities: Pres. Aero Club of St. Louis.

Flying Rating: Qualified Balloon Pilot; Aero Club of France 1908, No. 18; Qualified Aeroplane Pilot, Aero Club of America 1911, No. 61; Junior Military Aeronaut.

War Service: U. S. Air Service Major; Commanding Officer Army Balloon School, San Antonio, Texas.

Books: "Balloon Physics."

Member: Pres. Aero Club of St. Louis; Organized Mo. Aeronautical Society; Board of Directors, Aero Club of America; Pres. Automobile Club of St. Louis; Pres. Racquet Club; Pres. Glen Echo Country Club.

Present Occupation: Pres. Lambert Pharmacal Co.

Address: 2101 Locust St., St. Louis, Mo.; home, 2 Hortense Place, St. Louis, Mo.

Will Carpenter Lambert

LAMBERT, WILL CARPENTER, Commercial Aviator; born, Ironton, Ohio, Aug. 18, 1894; son of Will Gordon Lambert and Mary (Pierce) Lambert; married, Chloe Hall, Dec. 29, 1920.

Educated: Ironton High School.

Professional: Chemist and factory supervisor at the Nobel plant of the Canadian Explosives Ltd., Montreal, Quebec, 1914-1916.

Aeronautical Activities: Enlisted, R.F.C. in Toronto shortly before the U. S. declared war; served as instructor and gazetted 2nd Lieut., Oct. 13, 1917; joined 24th Sqd., R.F.C., B.E.F., March 1918 and served with this unit 6 months; officially credited with destruction of 17 enemy machines and 7 unofficial victories; discharged, Sept. 1919; manager, Lambert Commercial Flyers, photography and advertising through the South, 1919; organized R.A.F.U.S.A. Flyers, 1920, for Commercial work.

War Honors: Distinguished Flying Cross, July 4, 1918; Gazetted D.F.C., Aug. 3, 1918; Investiture, Prince of Wales, Nov. 1919 in Washington, D. C.

Member: Aero Club of Dayton and Cincinnati, Ohio; American Legion, Clarence Field Post, Ashland, Ky.

Address: 1448 Park Road, Washington, D. C.; home, 318 Hepler St., Ironton, Ohio.



Albert Bond Lambert

Lowell P. Lamoreaux

LAMOREAUX, LOWELL P., Insurance; born Minneapolis, Minn., March 4, 1894; son of Lowell A. Lamoreaux and May (Covell) Lamoreaux; married, Elizabeth Wood Johnson, June 5, 1914.

Educated: Grammar and high schools.

Professional: Insurance, 1915-1919; salesman, 1919-1921; insurance, 1921 to date.

Aeronautical Activities: Training at Rockwell Field; Ground School, Berkeley, Calif.; Camp Dick; Gerstner Field; Instructor, Pursuit Course, Rockwell Field; Exhibition Flying, July to Dec. 1920.

Flying Rating: Reserve Military Aviator.

War Service: Aug. 1917 to Dec. 1918.

Present Occupation: Insurance business.

Address: 419 McKnight Bldg.; home, 59 Seymour Ave., S. E., Minneapolis, Minn.

Sigmond Franklin Landers

LANDERS, SIGMOND FRANKLIN, 1st Lieut., Air Service; born, Carthage, Mo., Oct. 31, 1891; son of George W. Landers and Nancy C. Landers; married, Tressa Taylor, June 5, 1919.

Educated: Loveland High School, Loveland, Colo.; Colorado Agricultural College.

Aeronautical Activities: Flying training, 1918; commissioned 2nd Lieut., Air Service, Oct. 1918. attended armament officers school and Parachute instructor school 1920; took part in bombing of ex-German ships off Virginia Capes, 1921.

Flying Rating: Reserve Military Aviator, Oct. 1918; Airplane Pilot.

Present Occupation: 1st Lieut., Air Service.

Address: Kelly Field, Tex.; home, 747 Jefferson Ave., Loveland, Colo.

Reed Gresham Landis

LANDIS, REED GRESHAM, Executive; born, Ottawa, Ill., July 17, 1896; son of Kenesaw M. Landis and Winifred (Reed) Landis; married, Marian Keehn.

Educated: Public schools of Chicago; University of Chicago.

Professional: Advertising and sales, since 1915.

Aeronautical Activities: U. S. Air Service, June 1917 to March 1919; Vice-President International Aircraft Corp., July 1919 to Jan. 1920.

Flying Rating: Military Aviator.

War Service: Attached to British R. A. F. 40 Squadron until Sept. 1918; Major, Air Service Commanded U. S. 25th Aero Squadron, Sept. 1918 to Jan. 1919; Granted British Distinguished Flying Cross; American Ace, Officially credited with destruction of 9 airplanes and 1 Balloon.

Books: "On the Roof of the War"; "The Business Future of Aviation."

Member: Hamilton Club of Chicago; various Aero Clubs throughout the country; Beta Theta Pi.

Present Occupation: Vice-President, Keith-Landis Corp.

Address: Postal Telegraph Bldg., Chicago, Ill.

Edward Carter Braxton Landon

LANDON, EDWARD CARTER BRAXTON, Automobile Business; born, Newport News, Va., March 11, 1896; son of W. H. Landon and Lizzie B. Landon.

Educated: Hampton High School, Hampton, Va.; Randolph-Macon College; University of Georgia.

Professional: Clerk, Old Dominion Steamship Co. and C & O Railway Co., Newport News, Va.

Aeronautical Activities: School of Military Aeronautics; Ohio State University; Oxford University; Royal Machine Gun School; School of Aerial Fighting and Gunnery, 1918; Pilot, Flight Commander, Squadron Commander; 135th Squadron, U. S. Air Service, Toul Sector, 1918.

Flying Rating: Reserve Military Aviator, 1920.

War Service: U. S. Air Service, 1917 to 1919.

Present Occupation: Salesman, Byrd Motor Co., Knoxville, Tenn.

Address: 816-818 Gay St., Knoxville, Tenn.; home, Boulevard, Hampton, Va.

Ludlow T. Lanman

LANMAN, LUDLOW T., Banking Business; born, Brooklyn, N. Y., Sept. 29, 1897; son of Jonathan Trumbull Lanman and Mary (Ludlow) Lanman.

Educated: Groton School, Groton, Mass.; A. B. 1920, Harvard University.

Professional: Jones & Lanman, Sept. 1920 to Feb. 1921; New York Trust Co., Feb. 1921 to date.

Aeronautical Activities: Training at Kelly and Brooks Fields, 1918; acted as Instructor and Flight Commander at Brooks Field, 1919; flew on Harvard team in Intercollegiate Air Races at Mitchell Field, May 5, 1920.

Flying Rating: Reserve Military Aviator, April 2, 1918.

Present Occupation: Clerk, New York Trust Co.

Address: 100 Broadway; home, Lawrence, Long Island, N. Y.



Reed G. Landis

Thomas George Lanphier

LANPHIER, THOMAS GEORGE, Major, U. S. Air Service; born, Lohrville, Iowa, April 16, 1890; son of John J. Lanphier and Katherine Carey Lanphier; married, Janet I. Cobb, Feb. 1, 1915.

Educated: Lohrville High School; Creighton University, Omaha, Neb.; West Point Military Academy graduate, June 12, 1914.

Professional: Student and Army Officer.

Aeronautical Activities: Flying since Aug. 1918; Trained at Issoudun, France; was Executive Officer, Officer in charge of training and Commanding Officer Issoudun, France.

Flying Rating: Junior Military Aviator, Dec. 10, 1918.

War Service: Served with 8th Machine Gun Battalion, 3rd Division on Marne in Aisne-Marne Defensive.

Member: Aero Club of America; Bohemian Club, (San Francisco).

Present Occupation: Major U. S. Air Service.

Address: Post Field, Ft. Sill, Okla.; home, 2533 Cass St., Omaha, Neb.

Zachary Lansdowne

LANDSDOWNE, ZACHARY, Lt. Comdr., U. S. N.; born, Greenville, Ohio, Dec. 1, 1888; son of James Morton Lansdowne and Elizabeth (Knox) Lansdowne; married, Ellen MacKinnon, May 27, 1913.

Educated: U. S. Naval Academy, 1909.

Professional: Two years sea service as midshipman on battleship U.S.S. Virginia; four years sea service, torpedo boat destroyer, U.S.S. McCall.

War Service: Ordered to U.S.N.A.S., Pensacola, Dec. 1916; ordered to England, Aug. 1917; service at British Air Stations during war; R.N.A.S. Cranwell, R.N.A.S. Polgate, R.N.A.S. Pulham, R.N.A.S. owden, until March 1918; March 1918 to Sept. 1918, duty Office of Naval Operations, (Aviation) Navy Department Washington, D. C.; ordered to France and commanded U.S.N.A.S. Guipavas, France; duty Paris Headquarters, March to May 1919 following Armistice; made flight from East Fortune, Scotland to Mineola, L. I., U. S. A. in July 1919 on airship R-34; First westward and first transatlantic flight.

War Honors: Navy Cross (U. S.); Air Force Cross (British).

Member: New York Yacht Club; Army and Navy Club (Wash.).

Present Occupation: Bureau of Aeronautics, Navy Department, Washington, D. C.

Address: Navy Department, Washington, D. C.; home, Greenville, Ohio.

Gorman DeFreest Larner

LARNER, GORMAN, DE FREEST, Banking; born, Washington, D. C., July 5, 1897; son of Robert Martin Larner and Adelaide (De Freest) Larner.

Educated: Force School; Western High School; Lawrenceville Prep. School; A.B. 1921, Columbia University.

Aeronautical Activities: Lafayette Flying Corps; June 1917, training; Avord, Tours, Pau,

Plessis-Belleville: Pursuit Pilot; Corporal, Escadrille 86, Groupe de Combat 14; Dec. 1917, 1st Lieut., U. S. Air Service; April 1918, Flight Commander, 103rd Aero Squadron; May 1918, Captain, U. S. Air Service; Nov. 1918, Intelligence Officer, Peace Commission; Major, Reserve Corps, Feb. 1920.

Flying Rating: Reserve Military Aviator.

War Honors: Distinguished Service Cross with Bronze Oak Leaf; Croix de Guerre with two palms; American Ace, officially credited with destruction of 8 German airplanes (3 with French army and 5 with A. E. F.); Pourragere de la Croix de Guerre.

Member: Aero Club of America; Army and Navy Club; Aero Club of Columbia University; D. K. E. Club; Chevy Chase Club.

Present Occupation: Bond Department, Guaranty Co. of New York.

Address: 140 Broadway, New York, N. Y.; home, The Highlands, Washington, D. C.

John Miller Larsen

LARSEN, JOHN MILLER, Airplane Constructor; born, Hjørring, Denmark, Nov. 11, 1874; son of Anthon Larsen and Christine Larsen; married, Jennie A. Klitgaard, March 7, 1894.

Educated: Public schools of Denmark.

Professional: Creamery business in Denmark until 1892; introduced scientific Danish creamery method; in American dairy industry; Pioneer in scientific butter making from pasteurized cream; imported and invented creamery machinery; 1900, designed, manufactured and installed Larsen Ice Machines, from two to one-hundred-fifty tons capacity, in all parts of the United States; took Grand Prize, Panama Pacific International Exposition, 1915; set new world's record for the lowest temperature, -58 deg. F.; 1915-1917, assisted Allies in conserving Russian food supply by refrigeration; invented successful method for keeping fish fresh without freezing.

Aeronautical Activities: Took up flying as a sport in 1918; holds record for civilian cross-country flying; has flown over Europe and North America about 250,000 to 300,000 miles; holds American long distance non-stop record, Omaha to near Philadelphia; altitude record with five passengers of 23,000 ft.; imported Junker all-metal monoplane; improved and perfected them by exhaustive flying tests; at present manufacturing J. L. All-Metal Monoplanes; JLG airplane, owned and made by him, established World's Endurance Record, 26 hr. 19 min. 25 sec.

Member: Aero Club of America; Automobile



John M. Larsen

Club of America; Royal Danish Yacht Club; Danish Aeronautical Society.

Present Occupation: Engineering and investments.

Address: 347 Madison Ave., New York City.

Charles Lanier Lawrance

LAWRANCE, CHARLES LANIER, Aero Engine Manufacturer; born, Lenox, Mass., Sept. 30, 1882; son of Francis Cooper Lawrance and Sarah E. (Lanier) Lawrance; married, Emily Margaret Dix, Aug. 3, 1910.

Educated: Groton School, Groton, Mass.; A. B. 1905, Yale University; 1913, Ecole des Beaux Arts, Paris, France.

Professional: Engineer, B. L. M. Motor Car Co., 1907; built experimental 8 cylinder aviation motor, 200 hp., in Paris, France and developed the Eiffel No. 32 Wing Curve, 1912-1913; Engineer, S. S. Pierce Aeroplane Co., 1915; President and Chief Engineer, Lawrance Aero Engine Corp., 1917 to date.

Aeronautical Activities: Joined Naval Militia, New York, for aviation duties 1916; rank of Ensign; was not mobilized because of engineering work which was then doing for Navy Department.

Member: Society of Automotive Engineers; Aero Club of America; Racquet and Tennis Club; Knickerbocker Club; Yale Club; Westbrook Golf Club.

Present Occupation: President and Chief Engineer, Lawrance Aero Engine Corp.

Address: 644 West 44th St.; home, Bayshore, L. I., N. Y.

Walter R. Lawson

LAWSON, WALTER R., Captain, Air Service; born, Glenn Alter, Ga., Oct. 25, 1893; son of Frank H. Lawson and Mary Ellen (Ralls) Lawson; married, May Elaine Rogers, Sept. 11, 1913.

Educated: High school, Osceola County, Fla. **Professional:** Automobile business, 1910 to 1916.

Flying Rating: Aerial Observer, France, Jan. 12 to Oct. 22, 1918; Airplane Pilot, March 1919 to date.

War Service: On Mexican Border and in France, June 1916 to Nov. 1918.

War Honors: Distinguished Service Cross, Oct. 1918, citation by Commanding General, A. E. F.

Member: Aero Club of America.

Present Occupation: Captain, Air Service.

Address: Langley Field, Va.



Charles L. Lawrance

Earl Wilbert Leatherman

LEATHERMAN, EARL WILBERT, Commercial Aviation; born, Guilford Township, Medina County, Ohio, Oct. 29, 1891; son of Martin Leatherman and Barbara (East) Leatherman; married, Mary Elsie Feller, Jan. 1, 1922.

Educated: 1916, Bachelor of Mechanical Engineering, Ohio State University.

Professional: Draftsman with The Burger Iron Co. of Akron, 1913; Aeronautical Department, Goodyear Tire & Rubber Co., July 1916 to date (Oct. 1921).

Aeronautical Activities: Training flights in free balloons and airships during 1918 at the Goodyear Akron Air Station; Kite Balloon test flights for the purpose of testing out new designs developed by the Goodyear Aeronautical Department.

Flying Rating: Free Balloon Pilot, license No. 811.

Member: Society of Automotive Engineers; Akron University Club.

Present Occupation: In charge of Envelope Design, Aeronautical Department, Goodyear Tire & Rubber Co.

Address: Goodyear Tire & Rubber Co.; home, 43 Ruth Ave., Akron, Ohio.

William Bennett Leberherz

LEBERHERZ, WILLIAM BENNETT, Commercial Aeronautics; born, Frederick, Md., Dec. 4, 1885; son of William H. Leberherz and Margaret S. Leberherz; married, Harriett E. Behney, April 29, 1914.

Educated: St. Johns Literary Institution, Frederick, Md.

Professional: 1905-1916, With Ox Fibre Brush Co. of New York.

Aeronautical Activities: 1916 to date, with Gallaudet Aircraft Corp.; 1920, visited various European countries, studying the aircraft situation.

Present Occupation: General Manager, Gallaudet Aircraft Corp.

Address: East Greenwich, R. I.; home, 47 Lenox Ave., Providence, R. I.

E. Hamilton Lee

LEE, E. HAMILTON, Air Mail Pilot; born, Pars, Ill., April 18, 1892; son of John Thomas Lee and Lucy (Almeda) Lee; married, Veronica Poppy, March 13, 1913.

Educated: Public schools of Iowa and North Dakota.



William B. Leberherz

Professional: Aviation since 1913; flew exhibition until beginning of World War.

Aeronautical Activities: Civilian Flying Instructor, U. S. Army from June 23, 1917 to Dec. 1918; U. S. Air Mail Pilot from Dec. 1918 to date; senior pilot in the service.

Flying Rating: Aero Club of America License No. 2134; Federation Aeronautique Internationale experts certificate No. 188.

War Service: Army Civilian Flying Instructor of aerobatics, June 1917 to Dec. 1918.

Member: Aero Club of Illinois.

Present Occupation: Air Mail Pilot.

Address: U. S. Air Mail Field, Maywood, Ill.; home, 909 Sheridan Road, Chicago, Ill.

Walter Edwin Lees

LEES, WALTER EDWIN, Commercial Aviator; born, Janesville, Wis., July 16, 1887; son of Richard H. Lees and Frances L. Lees; married, Lea C. Lloyd, May 1915.

Education: Mazomanie, Wis. High School, 1900-1904; Mech. Engr., 1908-1910, University of Wisconsin.

Aeronautical Activities: Flew flying boat for Illinois Naval Reserves, May to Sept., 1915; instructed and tested, land and water for Curtiss Aeroplane Co., Sept. 1915 to May 1917; entered Army May 1917 as Civilian Flying Instructor; transferred to McCook Field, May 1918 as Test Pilot; Curtiss Aeroplane and Motor Corp., June 1919 to Oct. 1919; Oregon, Washington, and Idaho Airplane Co., Nov. 1919 to Sept. 1920; Russell Aviation Co., Spokane, Wash., Sept. to Feb., 1920; La Grande Aircraft Co., La Grande, Ore., Feb. 1921 to date.

Flying Rating: Pilot License; Aviator No. 660; Hydro No. 660; Expert No. 79.

War Service: Chief Flying Instructor (Civilian), May 1917 to May 1918; Test Pilot (Civilian), May to Dec. 1918.

Member: Aero Club of America.

Present Occupation: Commercial Aviation; Manager, La Grande Aircraft Co.

Address: 115 Depot St., La Grande, Ore.; home, 54 West 37th St., New York, N. Y.

Bruce Gardner Leighton

LEIGHTON, BRUCE GARDNER, Lt. Com., 1892; son of James Gardner Leighton and Maria (Ackley) Leighton; married, Ethel Ruth Major, June 30, 1915.

Education: Tunkhannock High School; U. S. Naval Academy, Class of 1913.

Professional: U. S. Navy since 1913.

Aeronautical Activities: Began flight training, Pensacola, April 1, 1916; Naval aviator April, 1917, Naval Aviator No. 40; Charge of Motor overhaul shops, Pensacola Air Station, April 1917 to January 1918; January 1918, temporary duty in connection with fitting out U. S. Navy Air Service at Killingholme, England; May to December 1918, at Killingholme as executive officer and squadron Commander, and Commanding officer from Nov. 1st until armistice; North Sea Anti Submarine patrol and reconnaissance; Jan. 1919, detailed as squadron commander of flying boat squadron Air Force, U. S. Atlantic Fleet, continuing until Dec. 1, 1920; during this period squadron maintained position with fleet at all times, cruising two years with fleet in Atlantic waters and in Caribbean waters, operations extending from Newport, R. I. to Kingston, Jamaica, Virgin Islands and practically all ports between these limits; developed fleet aircraft tactics, search and reconnaissance, spotting for gun fire, bombing, etc.; squadron cruised more than 25,000 miles during this time; Bureau of Engineering, Dec. 1920 to present date, in charge of heavier-than-aircraft power plant section, aviation division.

Flying Rating: Naval Aviator No. 40, April 17, 1917.

Present Occupation: In charge of heavier-than-aircraft power plant section, Bureau of Engineering, Navy Department.

Address: Bureau of Engineering, Navy Dept., Washington, D. C.; home, 2034 Allen Place, N. W., Washington, D. C.

Whitman Hill Lenoir

LENOIR, WHITMAN HILL, Planter; born, Prairie, Miss., Oct. 6, 1892; son of William Smith Lenoir and Julia (Paine) Lenoir.

Education: Aberdeen High School; Branham and Hughes Prep. School, Spring Hill, Tenn.; Vanderbilt University, 1914.

Professional: Actively engaged in operating planting interests.

Aeronautical Activities: Ground training, S. M. A. Austin, Tex. and Camp Dick, Nov. 1917 to March 1918; primary and advanced flying training, Park Field, Post Field and Taliaferro Field, March to Sept. 1918; Instructor in aerial gunnery, S. A. G., Taliaferro Field, Sept.-Nov. 1918; Air Service Depot, Garden City, L. I., N. Y., Nov.-Dec. 1918.

Flying Rating: Reserve Military Aviator and Pilot Gunnery Instructor.

War Service: U. S. Army, Nov. 1917 to Dec. 1918.

Member: American Legion; Aero Club of America.

Present Occupation: Planter.

Address: Prairie, Miss.

Leon Brewster Lent

LENT, LEON BREWSTER, Mechanical Engineer; born, Brewster, N. Y., July 22, 1876; son of Leander B. Lent and Rosetta (Brewster) Lent; married, Elizabeth M. Smith, Nov. 21, 1906.

Education: Brewster grammar and high schools, Stevens Institute of Technology, M. E., 1897.

Professional: Extensive engineering experience from August 1897 to June 1917; including, Associate Editor, "Power"; Steam and Gas Power plant design, construction and operation; design and construction of motor fire engine and also airplane engines.

Aeronautical Activities: 1917, development work on airplane engines; Aug. 1917 to May 1918, experimental engineering and flying at Langley Field; May 1918 to Nov. 1918, organized, equipped, and operated, field, hangars, repair shops at Camp Vail and also did flying for radio experiments; Nov. 1918 to May 1919, flying at Brindley, Roosevelt and Hazelhurst Fields; Jan. 1920 to March 1921, incidental flying with Air Mail Service including first transcontinental reconnaissance trip from New York to San Francisco and Los Angeles; General Superintendent of Air Mail Service from Jan. 1920 to Oct. 1920; Chief Engineer of Air Mail Service from Oct. 1920 to March 1921.

Flying Rating: Reserve Military Aviator, May 1, 1918.

War Service: Commissioned Captain, June 11, 1917 and ordered to duty at Curtiss plant, Buffalo, N. Y. on development of Curtiss-Kirkham engine; Aug. 1917 to May 1918, Engineer Officer at Langley Field, Va.; May 1918 to Nov. 11, 1918, in charge of all aviation work at Camp Vail, N. J.; commissioned Major, A. S. A., Aug. 12, 1918; Nov. 1918 to May 1919, in command of Brindley Field and Roosevelt Field, discharged from army, Oct. 11, 1919.

Member: American Society of Mechanical Engineers; Engineers Club, New York City; Aero Club of America.

Present Occupation: Mechanical Engineer.

Address: Engineers Club, New York City; home, 23 Cottage Place, White Plains, N. Y.

Elmer George Leonhardt

LEONHARDT, ELMER GEORGE, Air Mail Pilot; born, Cleveland, Ohio, Oct. 19, 1895; son of Theophilus Louis Leonhardt and Anna Elizabeth (Remelius) Leonhardt; married, Esther Florence Dewar, June 23, 1921.

Education: Public schools of Cleveland.

Professional: Installation Exchanges, Western Electric Co. and automobile business, 1914-1917.

Aeronautical Activities: S.M.A., Princeton University; Advanced Training at Gerstner Field; Instructor, Aerial Gunnery and Night Flying, Gerstner Field; Officer in Charge of Aero Repairs and Chief Tester for Eng. Department, Bolling Field; Air Mail Pilot for more than two years.

Flying Rating: Reserve Military Aviator, April 12, 1918.

War Service: Army, June 1917 to Feb. 1919.

Present Occupation: Air Mail Pilot.

Address: Air Mail Field; home, 6302 W. 110th Street, Cleveland, Ohio.

Rexford Byrde Levissee

LEVISSEE, REXFORD BYRDE, Air Mail Pilot; born, Clintonville, Wis., May 10, 1888; son of W. W. Levissee and Martha (Chandler) Levissee.

Education: Grammar and high school, Clintonville, Wis.

Professional: 1906-1909, Civil Engineering (field) North Side Land and Water Co., Twin Falls, Idaho; 1910-1917, Automobile Business.

Aeronautical Activities: Dec. 29, 1917-Feb. 18, 1918, primary flying school, Rockwell Field, San Diego, Calif.; Feb. 18, 1918-April 1, 1918, Supply Officer, 676 Aero Squadron Supply, Camp Dick, Dallas, Tex.; April 1, 1918-Dec. 8, 1918, primary flying instructor, Eberts Field, Lonoke, Ark.; occasional flying as Reserve Officer since armistice at Army Fields.

Flying Rating: Reserve Military Aviator, Feb. 18, 1918.

War Service: School of Military Aeronautics, University of Calif., Berkeley, Calif., Cadet, Sept. 20, 1917 to Nov. 24, 1917, Commissioned.

Member: Aero Club of America.

Present Occupation: Pilot, Air Mail Service, Salt Lake-San Francisco Division.

Address: Air Mail Service, Reno, Nev.

George William Lewis

LEWIS, GEORGE WILLIAM, Engineer; born, Ithaca, N. Y., March 10, 1882; son of William H.

Lewis and Edith (Sweetland) Lewis; married Myrtle D. Harvey, Sept. 9, 1908.

Education: Scranton High School; M. E. 1908, M. M. E. 1910, Cornell University.

Professional: Instructor, Cornell University, 1908-1910; Prof. Engineering, Swarthmore College, 1910-1917; Eng. in Charge Clarke Thomson Research, 1917-1919; Sales Mgr. Phila. Surface Combustion Co., 1919-1920.

Aeronautical Activities: member of Committee on Power Plants for Aircraft of N. A. C. A. 1918.

Books: Report No. 24, N. A. C. A.; Air flow through poppet valves.

Member: American Society Mechanical Engineers and Society Automotive Engineers, Franklin Institute.

Present Occupation: Executive Officer, National Advisory Committee for Aeronautics.

Address: 2722 Navy Bldg., Washington, D. C.; home, 6506 Ridgewood Ave., Chevy Chase, Md.

James Otis Lewis

LEWIS, JAMES OTIS, Commercial Aviator; born, Waco, Tex., June 24, 1894; son of Thomas E. Lewis and Minnie (Britton) Lewis; married, Myrtle M. Kemper, July 9, 1914.

Education: Public and high schools of Ardmore, Okla.; Southeastern Teachers College, Durant, Okla.; University of Texas.

Professional: Teacher in public schools of Hollister, Mo. and Cumberland Okla., 1913-1917; Aviator, 1920-1921.

Aeronautical Activities: Student at Kelly Field and Brooks Field; instructor in flying (Gosport), 1918, at Souther, Park, and Calstrom Fields; Civilian flying, instruction and exhibition, Aug. 1918 to present.

Flying Rating: Reserve Military Aviator, June 1918.

War Service: U. S. Army, 1917 to Aug. 1919.

Member: Aero Club of America.

Present Occupation: Commercial Aviator.

Address: Mt. Vernon, Mo.

Leslie Howard L'Hollier

L'HOLLIER, LESLIE HOWARD, Rubber Business; born, Birmingham, England, Dec. 27, 1889; son of Leon Edgar L'Hollier and Margaret Sanford L'Hollier; married, Miss Nana, Oct. 6, 1910.

Education: Ratcliffe College, Leicester, England; The Oratory College, Birmingham, England.

Professional: Tobacco and cigar commission business, New York, 1907-1912, Chihuahua, 1912-1914, Boston, 1914-1916; tire business, 1920 to date.

Aeronautical Activities: Cadet, R. F. C., Nov. 1916; 2nd Lieut., R. F. C.; Flying Officer, R. A. F.; Handley-Page pilot in pioneer flight, England to Egypt; Handley-Page pilot in pioneer flight, Egypt to India; discharged, Jan. 3, 1920.

Flying Rating: Service Pilot.

Honors: Air Force Cross.

Member: Royal Aero Club; Akron Flying Club.

Present Occupation: Rubber Business.

Address: Goodyear Tire & Rubber Co., Akron, Ohio; home, 582 Talbot Ave., Akron, Ohio.

Edgar A. Liebhauser

LIEBHAUSER, EDGAR A., 1st Lieut., Air Service; born, Marysville, Calif., Oct. 28, 1889; son of John A. Liebhauser and Annie Jane Liebhauser; married, Rose Anne Gillespie, April 7, 1920.

Education: Grammar and high schools of Marysville, Calif.

Professional: Mechanical engineer, 1911 to 1917.

Aeronautical Activities: Army training only; started flying, Dec. 17, 1917 at Ellington Field; active flying duty in Army Air Service to date.

Flying Rating: Airplane Pilot.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Alfred Lindeburg

LINDEBURG, ALFRED, 1st Lieut., Air Service; born, Newark, N. J., Sept. 25, 1896; son of John Lindeburg and Rosa (Schaefer) Lindeburg.

Education: Barringer High School, Newark, N. J.; Rutgers College, 1916 to 1917.

Aeronautical Activities: Flying cadet from Dec. 1, 1917 to March 14, 1918; A. E. F. from May 18, 1918 to Aug. 17, 1919; 14th Bombing Squadron, April 1921 to present date.

Flying Rating: Reserve Military Aviator, March 20, 1918; Airplane Pilot, Jan. 14, 1920.

War Service: A. S. E. R. C., Sept. 12, 1917 to March 14, 1918; 2nd Lieut., Air Service, March 14, 1918 to July 1, 1920; 1st Lieut., Air Service, July 1, 1920 to date.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Hampton, Va.; home, 58 S. 12th Street, Newark, N. J.

Garrett B. Linderman, Jr.

LINDERMAN, GARRETT B., JR., Commercial Aviator; born, Bethlehem, Pa., Aug. 22, 1891; son of G. B. Linderman and Jennie S. (Brothead) Linderman.

Educated: E.M. 1914, Lehigh University.

Professional: 1914-1917, mine examination work; 1917-1919 naval aviation.

Aeronautical Activities: Naval Aviation Instructor.

Flying Rating: Naval Aviator No. 1799; Aero Club of America hydro aeroplane No. 526.

Member: Aero Club of America; Aero Club of Pennsylvania.

Present Occupation: With Bethlehem Steel Co., Northampton Plant.

Address: University Club, Bethlehem, Pa.

Kenneth Proctor Littauer

LITTAUER, KENNETH PROCTOR, Writer; born, Newark, N. J., March 13, 1894; son of Alfred Littauer and Evelyn (Proctor) Littauer; married, Helen Averill, June 25, 1919.

Educated: Central High School, Washington, D. C.

Professional: Reporter, magazine writer, and editor, foreign and war correspondent, 1912-1921.

Aeronautical Activities: Service in French Aviation; enlisted, March 1916; aviation schools from April to Oct. 1916; breveted, July 1916; at the front, Escadrille C. 74 Oct. 1916 to Jan. 1918; commissioned Captain in U. S. Aviation, Jan. 1918; promoted to Major, Nov. 1918; at the front from May 1918 to Armistice.

Flying Rating: French Military Pilots Brevet No. 4023, July 1916; U. S. Air Pilots rating, 1921.

War Service: As above.

War Honors: Distinguished Service Cross; Croix de Guerre, with Palm and Star; Croix de Guerre (Belgium); Chevalier de l'Ordre de Leopold II; two American citations and the following citation by the Commander-in-Chief of the A.E.F.: "For repeated acts of heroism in action near Conflans, France, September, 14, 1918, and near Doullon, France, October 30, 1918. Major Littauer volunteered on a mission to protect a photographic plane for another squadron on September 14 and continued toward the objective at Conflans even after three other protecting planes had failed to start. In an encounter with five enemy pursuit planes, he completely protected the photographic plane by skillful maneuvering, although his observer was wounded and his machine seriously damaged. On October 30, Major Littauer, on duty as Chief of Air Service of the 3rd Army Corps volunteered and made an important reconnaissance of enemy machine-gun emplacements at a low altitude near Doullon."

Member: Adventurers' Club, New York.

Present Occupation: Magazine writer.

Address: Branford, Conn.

Albert Palmer Loening

LOENING, ALBERT PALMER, Airplane Manufacturer; born, New York City, Aug. 31, 1886; son of Albert Loening and Hermine R. Loening.

Educated: Cutler School, New York; Lawrence School, Lawrenceville, N. J.

Aeronautical Activities: Chairman, Committee on Amalgamation, American Flying Club.

War Service: Mexican Border Service with 7th New York Infantry, Captain Air Service June 1917, promoted to Major, Jan. 1919; Served with A. E. F.; Adjutant, Orly Field, France.

Member: Aero Club of America, Army and Navy Club (Wash.), American Legion, Sons of American Revolution; Aeronautical Chamber of Commerce.

Present Occupation: Vice-President and Treasurer, Loening Aeronautical Engineering Corp.

Address: 31 St. & East River, New York City. Home, 116 East 63rd Street, New York City.

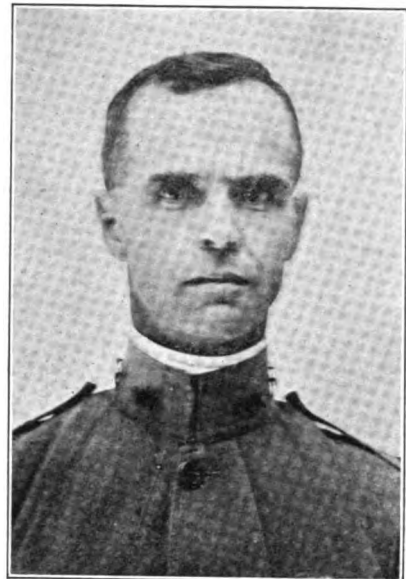
Grover C. Loening

LOENING, GROVER C., Aeronautical Engineer; born, American Consulate Bremen, Germany, father was United States Consul and U. S. Citizen and born in U. S. A.; son of Albert Loening and Hermine R. Loening.

Educated: Cutler school, New York City; Lawrenceville school, Lawrenceville, N. J.; B. Sc., A. M., C. E., Columbia University.

Professional: Chief Engineer, Queen Aeroplane Co., New York, 1911-1912; General Manager, The Wright Co., Dayton, Ohio, 1913-1914; Chief Aeronautical Engineer, U. S. Army Air Service, 1914-1915; Vice President and General Manager Sturtevant Aeroplane Co., Boston, Mass.; 1916-1917; President, Loening Aeronautical Engineering Corp., 1917-1921.

Aeronautical Activities: Built and flew in short straight-away, first flying boat, 1911-1912;

**Ira Longanecker**

Nov. 1, 1916; automobile distributor in Montana, July 1, 1908 to Dec. 6, 1915; automobile distributor in Western Washington, Dec. 6, 1915 to July 1, 1916; automobile distributor in Western Washington, Eastern Washington, Northern Idaho and Western Montana, July 1, 1916 to Sept. 26, 1919.

Aeronautical Activities: Distributor of Curtiss airplanes in Ohio and general aeronautical jobber, Sept. 26, 1919 to date; Pres. Floyd J. Logan Aviation Co., general flying, photographic work, etc.

Present Occupation: Curtiss distributor and aeronautical jobber.

Address: 712 West Superior Ave., Cleveland, Ohio; home, 3602 Euclid Ave., Cleveland, Ohio.

Ira Longanecker

LONGANECKER, IRA, Major, Air Service; born, Goshen, Ind., Feb. 16, 1880; son of Jacob Longanecker and Angeline H. Longanecker.

Educated: Elkhart Co. Grade Schools; Napance, Ind. High School.

Professional: Graduation from High School in 1898; short period in teaching and mercantile business from 1898 to 1902; 1902, enlisted in army.

Aeronautical Activities: Detailed in Aviation Section, Signal Corps, Nov. 1917; began pilot training April 1918; Commander, Gerstner Field, June to Nov. 1918.

Flying Rating: Junior Military Aviator.

War Service: Service, Washington, D. C., Nov. 1917 to April 1918; Gerstner Field, April 1918 to Nov. 1918; Selfridge Field, Chanute Field.

Present Occupation: Inspector General's Department.

Address: Washington, D. C.

George Edward Lovell, Jr.

LOVELL, GEORGE EDWARD, JR., Major, Air Service; born, Buffalo, N. Y., Aug. 10, 1889; son of George Edward Lovell, Sr. and Edith Lord Lovell; married, Marjorie Victoria Blackburn, July 15, 1916.

Educated: Grammar Schools, Buffalo, N. Y.; Chattanooga, Tenn. Grammar School; Central High School, Buffalo, N. Y.; U. S. Military Academy, West Point, N. Y., Class of 1913; Commissioned, U. S. Army, June 12, 1913, 2d Lieut. Cavalry.

Professional: 2nd Lt. 9th U. S. Cav. June 1913 to Nov. 1915; 7th Cav. Nov. 1915 to March 1916 (Service Mexican Border); Student Aviation School, San Diego, Calif., March 15 to Dec. 1, 1916; first Aero Squadron, Dec. 1, 1916 to March 1, 1917 (Punitive Expedition into Mexico); First Lt. Cav. May 15, 1916; Capt. Cav. May 15, 1917; Major, Cav. July 1, 1920; Transferred to Air Service as Major July 1, 1920; overseas service Sept. 15, 1918 to May 15, 1919; Stations, Aviation School, Tours, France; First American Army, A.E.F.

Aeronautical Activities: Student, Aviation School, San Diego, Calif., March 15, 1916 to Dec. 1, 1916; First Aero Squadron, Dec. 1 to March 1, 1917; Kelly Field, 5th Aero Squadron, Officer in charge flying until Nov. 1, 1917; C. O. Taliaferro Field, Ft. Worth, Tex. until Sept. 1, 1918; Oversea to Aviation School, Tours, France, as Executive Officer, until Jan. 15, 1919; First American Army, as Executive to Army A. S. Command.

**Floyd J. Logan**

Originated monoplane flying boat, also originated at Wright Co., 1912-1913, first American short-hull flying boat. Invented first monoplane rigid bracing pursuit machine at San Diego 1914; Built at San Diego, 1915, Signal Corps tractor used by Lt. B. Q. Jones in establishing world's three passenger endurance record and by Lt. T. F. Dodd in cross-country record, etc.; Introduced steel construction 1916, Sturtevant biplane; Began in 1917 the design and development of the Loening monoplane, and the Loening Seaplane, and continues development of new and original designs for U. S. Government; awarded Collier Trophy for 1922 for the design and development of the Loening Air-Yacht; winner of the Wright Trophy, Oct. 1921.

Books: "Monoplanes and Biplanes," 1917; "Military Aeroplanes," 9 editions, 1916-1918; "Revival of the Monoplane"; and numerous papers and articles.

Member: Aero Club of America, Society Automotive Engineers, Army and Navy Club (Wash.), New York Yacht Club, Seawanhaka-Corinthian Yacht Club, Columbia University Club, Society of Sigma Xi; Racquet and Tennis Club; Director, Aeronautical Chamber of Commerce.

Present Occupation: President, Loening Aeronautical Engineering Corp.

Address: 31 St. & East River; home, 116 East 63 Street, New York.

Floyd J. Logan

LOGAN, FLOYD J., Aircraft Dealer; born, Deerfield, Mich., Oct. 29, 1885; son of E. W. Logan and Anna Logan; married, Elizabeth Brooks, Aug. 24, 1918.

Educated: Deerfield High School; Cleary Business College, Ypsilanti, 1903; LL.B., Detroit College of Law, 1907.

Professional: Practiced law, Aug. 1, 1907 to

**Grover C. Loening**

der, until May 1, 1919; Adj. Rockwell Field, to July 29, 1919; C. O. Park Field, Tenn. to May 20, 1920; Commanding A. S. Activities, Camp Benning, Ga. to date.

Flying Rating: Pilot, Aero Club of America, July 1, 1916; Junior Military Aviator, Nov. 19, 1916; Military Aviator, Nov. 19, 1919; Airplane Pilot, (New rating) Oct. 5, 1920.

War Service: Regular Army during war; war service all in the Air Service, April 4, 1917 to Nov. 11, 1918.

Member: Air Service Association.
Present Occupation: Student, Air Service Engineering School.

Address: Air Service Engineering Div., McCook Field, Dayton, Ohio; home, 827 Five Oaks Ave., Dayton, Ohio.

William Joseph Lowry

LOWRY, WILLIAM JOSEPH, Educator; born, Kingfisher, Okla., Feb. 8, 1894; son of James H. Lowry and Elizabeth (McGrew) Lowry; married, Lucille Monforton, Dec. 24, 1920.

Educated: Public schools of Kingfisher, Okla.; A.B. 1916, Kingfisher College.

Professional: Teacher since 1916.

Aeronautical Activities: Cadet, S.M.A., Berkeley, Calif., Nov. 1917 to Jan. 1918; Flying Cadet, Rockwell Field, Instructor's Course, Brooks Field, 1918; Instructor, Park Field, 1918-1919.

Flying Rating: Reserve Military Aviator, April 1918.

War Service: April 1917 to Sept. 1919.

Present Occupation: Superintendent of Schools.

Address: Whitehall, Mont.

Charles Edward Lucke

LUCKE, CHARLES EDWARD, Prof. of Mechanical Engineering, Columbia University; born, New York City, June 20, 1876; son of John Franklin Lucke and Sarah Frances Lucke; married, Ida Marguerite Becker, 1904.

Educated: Public schools of New York City; C. C. N. Y.; N. Y. U.; Cornell; Columbia; B. S., 1895; M. S., 1897; Ph. D., 1902.

Professional: Professor of Mechanical Engineering, Columbia University, New York City and head of dept.; joined dept., 1902; Consulting Engineer since 1902.

Aeronautical Activities: Student of Aviation Engines and investigator since beginning; organized and directed U. S. Navy Gas Engine School during War, for training all naval aviation maintenance force and aviation engineer officers.

War Service: Civilian Director U. S. N. Gas Engine School from Sept. 4, 1918 to March 17, 1919; commissioned Lt. Com., Sept. 4, 1918; cited in annual report of Secretary of Navy, Jan. 1919; promoted to Commander on recommendation of Selection Board, April 1, 1919.

Member: Columbia University and Engineer's Club; Society of Automotive Engineers; Society N. A. and M. E.; Columbia Post of American Legion; A.S.M.E.; A.S.R.E.; S.R.E.E.; A.G.I.; Naval Reserve Officers Assn.

Present Occupation: Prof. of Mech. Eng., Columbia University; Consulting Engineer.

Address: Columbia University; home, 544 West 142nd St., New York City.

George Francis Lyon

LYON, GEORGE FRANCIS; born, Newark, N. J., April 21, 1876; son of Frank G. Lyon and Christine A. (McGowan) Lyon.

Educated: Public school, New York City; Walkill Academy, Middletown, N. Y.

Professional: Lt. and Lt. Col., Philippine Constabulary, 1902-1918; served as Adjutant General five years, Quartermaster one year; participated in actions in Philippines.

Aeronautical Activities: Third Assistant to Director, Aircraft Production, Chief, Collection Division, Information Group, A.S., Secretary, Advisory Board in charge presentation A.S. estimates before committee of military affairs, 1918, 1919; resigned as Major, Air Service, Nov. 1919.

War Service: 1898, Astor Battery in Philippines; Major, American Red Cross, Siberia, as business executive; Commissioner to Serbia, American Red Cross, 1920.

War Honors: Order of Redeemer (Greece); Commander Order Danilo I (Montenegro); St. Sava 3rd class, Serbia, 1920.

Member: Army and Navy Club, Manila, P. I. National Arts Club, New York, N. Y.

Address: 401 N. Park Ave., River Forest, Ill.; home, National Arts Club, New York City (Temporary, Dec. 3, 1921).

Alexander McAdie

MCADIE, ALEXANDER, Meteorologist; born, New York City, Aug. 4, 1863; son of John McAdie and Anne (Senclair) McAdie; married, Mary Randolph Browne, Oct. 7, 1893.

Educated: New York public schools; College, City of New York; Harvard University.

Professional: District Forecaster, U. S. Weather Bureau, New Orleans, San Francisco; Prof. of

Meteorology, U. S. Weather Bureau; Director, Blue Hill Observatory; Prof. of Meteorology, Harvard University.

Aeronautical Activities: Senior Aerographic Officer in the Navy, 1918-1919; overseas in 1918 establishing aerographic observatories at Naval Air Stations, Ireland, England, France.

War Service: Lt. Com., U. S. Naval Reserve Force, Feb. 1, 1918 to June 5, 1919.

Books: "Principles of Aerography", Rand McNally Co., 1917; many scientific papers.

Member: Fellow, many learned societies, foreign and home.

Present Occupation: Prof. of Meteorology, Harvard University.

Address: Blue Hill Observatory, Readville, Mass.

William Caldwell McChord

MCCHORD, WILLIAM CALDWELL, Major, Air Service; born, Lebanon, Ky., Dec. 29, 1881; son of R. C. McChord and Elizabeth H. McChord.

Educated: Public schools, Lebanon, Ky.; B. L. 1901, Central University, Ky.; U. S. Military Academy, 1907.

Aeronautical Activities: Executive Officer, Ellington Field, July 1 to Aug. 14, 1918; Commanding Park Field, Aug. 16 to Nov. 12, 1918; Commanding Gerstner Field, Dec. 16, 1918 to March 3, 1919; Assistant Chief, Finance Division, Air Service, March 15 to July 30, 1919; Chief, Material Disposal and Salvage Division, Air Service, July 31 to Sept. 15, 1919; Asst. Chief of Property Division, Air Service, Sept. 16, 1919 to June 1920; Air Service Officer, Central Dept. Chicago, July 1920 to Oct. 1920; Air Officer, 6th Corps Area, Fort Sheridan, Ill., from Oct. 1920 to date.

Flying Rating: Junior Military Aviator, May 30, 1918.

War Service: Served throughout the war, Regular Army.

Member: Army and Navy Club (Wash.); Chicago Athletic Club; Hon. Member, Aviation Club of Chicago.

Present Occupation: Air Officer, 6th Corps Area.

Address: Fort Sheridan, Ill.

Charles W. McClellan

MCCELLELLAN, CHARLES W., Manufacturer; born, Fall River, Mass., July 1, 1896; son of Charles P. McClellan and Teresa K. (Gilday) McClellan.

Educated: Borden Grammar School; Westall Grammar School; B.M.C. Durfee High School; Brown 1914; Lowell Textile Institute, 1915-1917; B. Textile Chemistry and Dyeing.

Professional: Manufacturer of Marine Equipment.

Aeronautical Activities: U. S. Military School of Aeronautics, Cornell University; Camp Dick; Love Field.

Flying Rating: Reserve Military Aviator.

War Service: Army, July 1917 to Jan. 1919.

Member: Massachusetts Aero Club.

Present Occupation: Manufacturing.

Address: 22 Boomer St.; home, 928 Rock St., Fall River, Mass.

David McClure

MCCLURE, DAVID, Automobile Salesman; born, Harrisburg, Pa., Jan. 2, 1897; son of George S. McClure and Caroline (Hepkins) McClure.

Educated: High school, Miami, Fla., 1916.

Professional: Salesman of Real Estate with Real Estate Trust Co. of Pittsburgh, Sept. 1916 to June 1917 and also May 1919 to July 1921.

Aeronautical Activities: Training at Ohio State University Ground School, Wilbur Wright Field and Gerstner Field, June 1917 to Feb. 1918; Issoudun, France, March-May, 1918; Aerial Gunnery at Furbara, Italy, June 1918; Ferry Pilot at Orly, France, July 1918; St. Mihiel Sector with 213th Aero Squadron 3rd Pursuit Group, Aug.-Sept. 1918.

Flying Rating: Reserve Military Aviator, Dec. 1917.

War Service: June 12, 1917 to Jan. 25, 1919.

War Honors: Sept. 18, 1918, in single handed combat with seven Fokkers near Metz, shot down three of them before being wounded and shot down and taken prisoner; three victories officially confirmed.

Member: Aero Club of America; Aero Club of Pittsburgh.

Present Occupation: Automobile Salesman.

Address: c/c J. W. Kemp, 8th and Lime Sts.; home, 184 Ramona Drive, Riverside, Calif.

Harold Fowler McCormick

MCCORMICK, HAROLD FOWLER, Manufacturer; born, Chicago, Ill., May 2, 1872; son of Cyrus Hall McCormick and Nettie (Fowler) McCormick; married, Edith Rockefeller, Nov. 26, 1895.

Educated: University School of Chicago; Brow-

ning School of New York City, 1889-1891; A. B. 1895, Princeton University.

Professional: International Harvester Co.; became President Dec. 26, 1918; Trustee, University of Chicago, McCormick Theological Seminary, Chicago Orchestral Assn.; Director, First National Bank of Chicago, Chicago Grand Opera Assn.

Aeronautical Activities: Vice President and Member Board of Directors of Aero Club of America; President of Aviation Meet in Chicago in 1911.

Books: "From My Experiences Concerning Aviation."

Member: Aero Club of America; Aero Club of Illinois.

Present Occupation: President, International Harvester Co.

Address: 606 S. Michigan Ave.; home, 1000 Lake Shore Drive, Chicago, Ill.

Thomas Chenault McCown

MCCOWN, THOMAS CHENAULT, Agriculturist; born, Richmond, Ky., Feb. 11, 1896; son of Albert Kirk McCown and Anne (Chenault) McCown; married, Marie Louise Kellogg, Jan. 21, 1920.

Educated: Private Prep. School, Richmond, Ky.; B.S. 1917, University of Kentucky.

Professional: Agriculturist.

Aeronautical Activities: Machinist Mate Aviation, Oct. 1917 to Jan. 1918, Pensacola, Fla.; Ground School as Chief Quarter Master, Feb. 1 to April 15, 1918; elementary flying, April to July 1918; advanced flight and ground training, instructor in bombing and Fboat flying, Aug. and Sept. 1918; submarine patrol and mine search pilot, pilot mail plane between Hampton Roads, Va. and Washington, D. C., Oct. 1918 to Feb. 1919.

Flying Rating: Ensign U. S. N. R. F., Sept. 1918.

War Service: Naval Aviation Patrol and mine search in hostile submarine zones off Atlantic Coast.

Present Occupation: Agriculturist.

Address: Ford Pike, Richmond, Ky.

James Comly McCoy

MCCOY, JAMES COMLY, Aeronaut; born, Urbana, Ill., Feb. 5, 1862; son of Asa S. McCoy and Lydia (Chamberlain) McCoy; married Florence Littlefield, June 1, 1892.

Educated: Bloomington, Ill., High School; Wesleyan University, Jacksonville, Ill.

Professional: Electrolytic Copper Refining, 1893 to 1906; Banker, President Perth Amboy Trust Co., 1906 to 1916.

Aeronautical Activities: Balloon pilot since 1906. Aide to Capt. C. DeF. Chandler in winning first Lahm Trophy 1907 (20 hrs. 15 min.); Pilot Aeronautique; represented America in International Balloon Race St. Louis, 1907 and Berlin, Germany 1908.

Flying Rating: Aero Club of France, 1906; Aeronautic Pilot, Aero Club of America, License No. 1, 1907; Junior Military Aeronaut.

War Service: Capt., Signal Corps; Major, U. S. Air Service.

Member: Aero Club of America, (incorporator); N. Y. Yacht Club; Manhattan Club; Grolier; Hope Club; Squantum Club, Providence, R. I.; Travellers Club of Paris, France.

Present Occupation: Retired.

Address: Nayatt Point, West Barrington, R. I.

William R. McCulla

MCCULLA, WILLIAM R., Sales Engineer; born, Armagh, Ireland, Dec. 20, 1887; son of Robert McCulla and Marian (Pringle) McCulla; married, Edith Gilmore, June 19, 1920.

Educated: Public school of Belfast, Ireland; Queens College, Belfast, Ireland.

Aeronautical Activities: Aircraft engineer. Packard Motor Car Co., 1916; engineer, Aircraft Division, Willys-Overland Co., Toledo and Toronto, 1917-1919.

Present Occupation: Sales engineer and Manufacturers representative.

Address: 4612 Woodward Ave., Detroit, Mich.

Leslie MacDill

MACDILL, LESLIE, Major, Air Service; born, Monmouth, Ill., Feb. 19, 1889; son of Edgar Mae Dill D. D. and Lessie (Buck) MacDill.

Educated: Public Schools, Xenia, Ohio and Madison, Ind.; Hanover (Ind.) College; Indiana University; Massachusetts Institute of Technology; A. B. 1909; A. M. 1911.

Professional: Officer in U. S. Army since 1912.

Aeronautical Activities: Aviation Student 1914-1915; First Aero Squadron 1915-1916; Second Aero Squadron 1916-1917; Staff Chief Air Service, A. E. F. 1917-1918; Commanding Officer Aerial Gunnery School at St. Jean des Montes, France, May 1918-Feb. 1919; Staff director Air Service, U. S. Army, 1919-1920; Chief of Operations, Advisory Board.

Flying Rating: Student Aeronautical Engin-

earing, M.I.T. 1921-1922; Junior Military Aviator, 1915, Military Aviator, 1918; Airplane Pilot, 1920.

Military Service: 2d Lieut. Coast Artillery Corps 1912-1914; Aviation Section, Signal Corps, 1914-1915; First Lieut. A.S.S.C. 1915-1916; Capt. A.S.S.C. 1916-1917; Major A.S.S.C. 1917-1918; Lt. Col. Air Service, 1918-1920; Major Air Service 1920.

Present Occupation: On Duty, Massachusetts Inst. of Tech., Cambridge, Mass.

Address: 541 Commonwealth Ave., Boston, Mass.; Permanent: Care, Office Chief of Air Service, Washington, D. C.

Chas. Stuart Macdonald

MACDONALD, CHAS. STUART, Airplane Manufacturer; born, Chicago, Ill., Jan. 11, 1889; son of Chas. Alexander Macdonald and Martha S. Macdonald.

Education: University School, Chicago.

Professional: Automobile business, 1906 to 1911, from factory to agent; automobile cost accounting, 1911 to 1914; specializing in truck and garage operations.

Aeronautical Activities: Built copy Curtiss F. boat, winter 1914, flew it at Lake Michigan, summer 1915; joined sales department, Curtiss Co., Jan. 1916; took active charge, American Transoceanic Co., N. Y., June 1916 to Oct. 1917; Asst. Mgr. and Secretary, Interallied Aircraft Corp., N. Y., May 1919 to Jan. 1921; Sales Mgr., Lawrence Sperry Aircraft Co., Jan. 1921 to date.

Flying Rating: Seaplane pilot since 1915; land pilot since 1918.

War Service: 1st Lieut., U. S. Air Service, Nov. 20, 1917 to Jan. 13, 1919; stationed Selfridge Field, Mt. Clemens, Mich.

Member: Aero Club of America.

Present Occupation: Sales Manager, The Lawrence Sperry Aircraft Co., Inc.

Address: Farmingdale, Long Island, N. Y.; home, Shoreward Drive, Great Neck, Long Island, N. Y.

George C. McDonald

MCDONALD, GEORGE C., 1st Lieut., Air Service; born, Philadelphia, Pa. April 27, 1892; son of George C. McDonald and Anna R. (Bieglan) McDonald.

Education: Jesse George, Philadelphia, Pa.; University of Pennsylvania.

Professional: Wholesale hardware business.

Aeronautical Activities: Aviation School, Esington, Pa., Ohio State University and Waco, Tex.; flying cadet and instructor; commissioned 2nd Lieut., May 1918.

Flying Rating: Reserve Military Aviator, May 1918; Airplane Pilot, Oct. 1919.

War Service: Instructor at Payne Field, West Point, Miss. and Long Island Fields.

Member: Aero Club of Pennsylvania; Aero Club of America.

Present Occupation: 1st Lieut., Air Service. **Address:** Langley Field, Va.; home, Bywood, Philadelphia, Pa.

Jasper Kemper McDuffie

MCDUFFIE, JASPER KEMPER, 1st Lieut., Air Service; born, Marion, S. C., Dec. 15, 1892; son of Emerson McDuffie and Sally Ida (Fore) McDuffie; married, Elizabeth Cameron Hoofnagle, May 1, 1920.

Education: Marion High School, Marion, S. C.; 1914-1916, Randolph-Macon College; 1916-1917, Columbia University.

Aeronautical Activities: Ground School at Georgia Tech., Nov. 3, 1917 to Jan. 12, 1918; primary training at Park Field; commissioned, April 30, 1918; advanced training at Issoudun, France, Oct. 13, 1918 to Dec. 12, 1918; 138th Aero Squadron, Lay-St-Remy, France and Coblenz, Germany from Jan. 1, 1919 to July 10, 1919; photographic school, Langley Field, May 1920 to date.

Flying Rating: Reserve Military Aviator, April 20, 1918; Airplane Pilot, July 1920.

War Service: Enlisted A.S., S.R.C., Oct. 8, 1917; commissioned 2nd Lieut., Air Service, April 30, 1918; 1st Lieut., Air Service, July 1, 1920.

Present Occupation: Airplane pilot and instructor, School of Aerial Photography.

Address: Langley Field, Va.; home, Marion, S. C.

George W. McEntire

MCENTIRE, GEORGE W., Capt. Air Service; born, Kansas City, Mo., July 7, 1885; son of William W. McEntire and Flora A. (Miller) McEntire.

Education: Kansas City High School; Drury College, Springfield, Mo.

Professional: Automobile Salesman.

Aeronautical Activities: Officer in charge of transportation, Fort Omaha, 1917-1918; Instructor, airship school, Langley Field, 1919-1920; O. I.C. Airship school 1921; supervising construction of airships, Goodyear, Akron, 1922.

Flying Rating: Free Balloon Pilot; Balloon Observer; Airship Pilot.

War Service: July 9, 1917 to Nov. 11, 1918.

Present Occupation: Captain, Air Service.

Address: McCook Field, Dayton, Ohio; permanent, 1108 Park Ave., Kansas City, Mo.

Andrew Calhoun McFall

McFALL, ANDREW CALHOUN, Lieutenant U. S. Naval Aviation; born, Darlington, S. C., Feb. 6, 1893; son of Lillie Duncan McFall.

Education: Ridgeway High School; Donaldson Military Academy; U. S. Naval Academy.

Aeronautical Activities: Completed courses at Pensacola, Fla., Nov. 9, 1920, Carlstrom Field, Jan. 15, 1921, Kelly Field, April 1, 1921; Atlantic Fleet Shipplane Div., April 10, 1921, Test Pilot, Naval Aircraft Factory, May 20, 1921 to date.

Flying Rating: Naval Aviator.

Present Occupation: Test Pilot, Naval Aircraft Factory.

Address: Naval Aircraft Factory, Philadelphia, Pa.

Donald Walker McIlhiney

McILHINEY, DONALD WALKER, Aeronautical Engineer; born, New York City, Jan. 17, 1898, son of Parker C. McIlhiney, A. M., Ph. D. and Clarissa Ann (Walker) McIlhiney.

Education: New Jersey Military Academy; A. B. 1919, Columbia University.

Professional: Technical Assistant, Research Department, Curtiss Engineering Corp.; Editorial Staff, Automotive Industries; Associate Editor, Aviation; Associate Editor, Who's Who in American Aeronautics.

Aeronautical Activities: U.S.S.M.A., Cornell, Oct. 15-Dec. 15, 1917; Gerstner Field, Dec. 15, 1917 to May 19, 1918; commissioned 2nd Lieut., May 2, 1918; C.O. 299 Squadron, Pittsburgh, Pa., May 20-Aug. 28; Personnel off. A.S. Radio Mech. Sch., Pittsburgh, Pa., June 5-Aug. 7; Gunnery course, Wilbur Wright Field, Sept. 1-30; test Pilot's School, Wilbur Wright Field, Oct. 1-21; A.S. Depot, Garden City, L. I., Oct. 21-Dec. 26; Rockwell Field, Jan. 1, 1919; Mess Officer, Ream Field, Feb. 5-March 3; Rockwell Field Sqdn. D, March 3-April 1; 2nd Lieut. ASORC to date.

Flying Rating: Reserve Military Aviator, May 2, 1918; Aero Club License; Aero Club Expert Aviators Certificate No. 258.

War Service: 1st O.T.C., Plattsburg, May 15-Aug. 15, 1917; April 17, 1917 to April 10, 1919.

Author: A Figure of Merit for Airplanes, etc. **Member:** Aero Club of America; Society of Automotive Engineers.

Present Occupation: Aeronautical Engineer. **Address:** Great Neck, Long Island, N. Y.

Lawrence W. McIntosh

MCINTOSH, LAWRENCE W., Major, Air Service; born, Ashburnham, Mass., Aug. 23, 1885; son of William E. McIntosh and Mable S. McIntosh.

Education: High school; U. S. Military Academy.

Professional: Detailed as Major, Aviation Section, Signal Corps, 1917; promoted to Lt. Col. Aug. 1918; duty at Kelly Field, Oct. 1917 to March 1918; Commanding Officer, Selfridge Field, Armorer's School, Wilbur Wright Field, 1918; Assistant Executive, Office Director of Air Service, 1919; Commanding Officer, Ellington Field, Selfridge Field, May to Nov. 1919; student, Air Service Engineering School, Nov. 1919 to Nov. 1920; Assistant to Chief, Engineering Division, McCook Field, Nov. 1920 to date.

Flying Rating: Junior Military Aviator; Airplane Pilot.

War Service: As above.

Member: Aero Club of Texas.

Present Occupation: Assistant to Chief, Engineering Division.

Address: McCook Field; home, 223 McDaniels Street, Dayton, Ohio.

Washington F. A. McIntyre

MCINTYRE, WASHINGTON, F. A., Rancher; born, Olean, N. Y., March 6, 1893; son of Joseph McIntyre and Justina (Anderson) McIntyre.

Education: Grammar and high schools; B.S. in Metallurgy, 1914, University of California.

Professional: Metallurgy, 1915-1916; ranching in Southern California, 1916 to date.

Aeronautical Activities: Training at March Field, 1918-1919.

Flying Rating: Reserve Military Aviator, March 1919.

War Service: As above.

Member: Allied Fliers Club, Oakland, Calif.

Present Occupation: Rancher.

Address: Thermal, Calif.

Virgil Vincent McKenna

McKENNA VIRGIL VINCENT, Aeronautical Engineer; born, Brooklyn, N. Y., Nov. 5, 1894; son of John A. McKenna and Nora M. (Brady) McKenna.

Education: Westbury Public School; St. John's Preparatory School; Polytechnic Institute, Brooklyn, N. Y.; Civil Engineer, 1917, Columbia University.

Aeronautical Activities: Ground School, M.I.T., 1918; preliminary training, Bayshore, L. I., 1918; advanced training, Pensacola, Fla.; course in aeronautical engineering, M.I.T., 1918-1919; Naval Aircraft Factory, Philadelphia, Aeronautical Engineer, Feb. 1919 to date. (1921).

Flying Rating: Naval Aviator No. 1126.

War Service: As above.

Present Occupation: Aeronautical Engineer, Naval Aircraft Factory.

Address: Naval Aircraft Factory, Philadelphia, Pa.; home, Westbury, Long Island, N. Y.

William Cameron McKenzie

McKENZIE, WILLIAM CAMERON, Stock Raiser; born, Florence, S. C., June 23, 1894; son of Joseph Saunders McKenzie and Leila Pettigmo McKenzie.

Education: Davidson College (2 yr.)

Professional: Farming and Stock raising.

Aeronautical Activities: M.I.T. naval ground school, March 25, 1918; Naval Air Station, Key West, Fla., June 12, 1918; Naval Air Station, Miami, Fla., July 1918; commissioned Ensign at Pensacola, Sept. 18, 1918; Naval Air Station, Hampton Roads, Va. until Jan. 9, 1919.

Flying Rating: Naval Aviator, No. 1263.

War Service: April 6, 1917 to Jan. 9, 1919.

Present Occupation: Stock Raising.

Address: Bannockburn, S. C.

John Whitten McKeon

McKEON, JOHN WHITTEN, Traffic Clerk; born, Long Island City, N. Y., Aug. 1, 1895; son of Patrick Henry McKeon and Ophelia Dyer.

Education: Public School No. 7, N. Y.; Bryant High School; A.B., Columbia, 1917.

Professional: Troy Laundry Machinery Co., Oct. 1919 to date.

Aeronautical Activities: U.S.S.M.A., Cornell Aug. 13, to Oct. 6, 1917; 2nd A.I.C., Tours, France, March 17, 1918 to Aug. 15, 1917; Instructor 7th A.I.C., Clermont-Ferrand, Sept. 8, 1918 to Oct. 1, 1918; 166 Aero Squadron, Oct. 9, 1918 to April 17, 1919.

Flying Rating: Aerial Observer (Bombardment).

War Service: July 18, 1917 to June 9, 1919.

Honors: Cited in G. O. No. 29, Par. 14, Office of First Army Air Service Commander, A.E.F., Nov. 21, 1918.

Member: American Legion; Aero Club of America.

Present Occupation: Traffic Clerk.

Address: 133 Centre Street, New York City; home, 112 Fulton Ave., Astoria, L. I., N. Y.

John S. McKibben

McKIBBEN, JOHN S., Machinist; born, Malvern, Iowa, Nov. 30, 1880; son of Edward McKibben and Carrie McKibben.

Education: Public schools of Omaha, Nebr.

Professional: Bicycle racing, 1896-1899; motorcycle racing, 1899-1902; motor car racing, 1908-1910.

Aeronautical Activities: Mechanic on Farman and Bleriot planes, 1910-1911; qualified as balloon pilot in 1917; instructor, Missouri Aero Society.

War Service: Enlisted in Signal Corps, July 9, 1917.

Member: St. Louis Flying Club; Missouri Aero Society.

Present Occupation: Machinist.

Address: 3805 Laclede Avenue; home, 1811 La Salle St., St. Louis, Mo.

Robert McKnight

McKNIGHT, ROBERT, Advertising; born, St. Louis, Mo., Oct. 31, 1891; son of William C. McKnight and Irene B. McKnight; married, Alberta Boyd, June 11, 1919.

Education: Public schools of Chicago; Ph.B. 1915, University of Chicago.

Professional: Newspaper reporter and editor, 1915-1917; advertising copywriter and plan man, 1919 to date.

Aeronautical Activities: Entered Ground School of University of Illinois, Sept. 1917; A.E.F. with 14th Foreign Detachment Flying Cadets; flying training at Issoudun, France.

Flying Rating: French Brevet, Aug. 1918; Reserve Military Aviator, Aug. 1918.

War Service: Air Service Signal Corps, Sept. 1917 to Feb. 1919.

Present Occupation: Advertising copywriter.

Address: 1124 Thorndale Ave.; home, 1617 Columbia Ave., Chicago, Ill.

Sherman E. McNamara

McNAMARA, SHERMAN E., Insurance Business; born, Buffalo, N. Y., March 9, 1891; son of Patrick J. McNamara and Elizabeth T. McNamara; married, Margarette Welsh, June 2, 1920.

Education: Public schools of Buffalo, N. Y.

Professional: 1912, Railroad work; 1914-1917, banking; 1919 to date, insurance.
Aeronautical Activities: Nov. 1917 to March 1918, Ground School, Georgia School of Technology; commissioned and assisted in the Supply Division of Balloon Section; Kelly Field for flying training, Sept. 1918 to Jan. 1919.
War Service: Nov. 1917 to Jan. 1919.
Member: Aero Club of America.
Present Occupation: Assistant Treasurer, Merchants Mutual Auto Liability Insurance Co.
Address: 168 Franklin St.; home, 16 Granger Place, Buffalo, N. Y.

Joseph Taggart McNarney

M McNARNEY, JOSEPH TAGGART, Major, Air Service; born, Emporium, Pa., Aug. 28, 1893; son of James P. McNarney and Helen (Taggart) McNarney; married, Helen Walnberger, June 30, 1917.

Educated: Emporium public and high schools; 1915, U. S. Military Academy.
Professional: U. S. Army Officer; 21st Infantry, 1915-1916; Aviation Section, Signal Corps and Air Service, 1916 to date; Temporary Major and Lt. Col.

Aeronautical Activities: On continuous flying duty since Oct. 1916; served as pilot, 1st Aero Squadron, Columbus, N. M. and France; ordered to A.E.F., Aug. 1917; Flight Squadron and Group Commander, Corps Observation; Group Commander, Army Observation; Chief of Air Service 3rd and 6th Corps; Commanding Officer, Goodman Field, Camp Knox, Ky., Gerstner Field, 1919-1920; Instructor, Field Officers School, Langley Field, Nov. 1920 to date.

Flying Rating: Junior Military Aviator; Airplane Pilot.

War Service: A.E.F. Aug. 1917 to June 1919.
Books: "Observation Air Service Manual."
Present Occupation: Instructor, Field Officers School, Langley Field.

Edwin R. McReynolds

McREYNOLDS, EDWIN R., 1st Lieut., Air Service; born, Reasnor, Jasper Co., Iowa, July 3, 1893; son of Frances E. McReynolds and Minnie M. McReynolds.

Educated: Monroe public and high schools.
Professional: Telephone business, 1910 to 1916; salesman, 1916 to 1917; automobile business, Jan. to Nov. 1917.

Aeronautical Activities: Cornell Ground School, March 1, 1918 to May 10, 1918; primary training from June 1, 1918 to Oct. 6, 1918 at Carlstrom and Dorr Fields and Barron Field; commissioned 2nd Lieut., Oct. 8, 1918; student officer at Post Field, Oct. 23, 1918 to Dec. 23, 1918; Engineering Department to Oct. 23, 1919; Mexican Border, 8th Aero Squadron to July 15, 1920; A.S.M.S., Kelly Field to Sept. 1, 1920; May 15, 1921 to present at Langley Field.

Flying Rating: Reserve Military Aviator, Oct. 8, 1918; Airplane Pilot, Oct. 1919.

Present Occupation: 1st Lieut., Air Service.
Address: Langley Field, Va.; home, Newton, Iowa.



William J. Malone

William J. Malone

MALONE, WILLIAM J., Lawyer; born, Bristol, Conn., Dec. 26, 1879; son of Michael Malone and Catherine (McKernan) Malone; married, Thekla McCabe, June 10, 1916.

Educated: Public schools of Bristol, Conn.; LL.B. 1900, M.L. 1901, Yale University.

Professional: Admitted to Connecticut Bar in 1901; Member Legislature, 1907-1911; Assistant Attorney General, Connecticut, last three years; Judge, city of Bristol, last fifteen years; Corporation Counsel, City of Bristol, eight years up to war when resigned to enlist; commissioned Major 2nd R.O.T.C., Plattsburg, Nov. 1917.

Aeronautical Activities: Member, Aviation Examining Board, Washington; Cadet, Gerstner Field, 1918; C.O., 143rd Aero Pursuit Squadron, Lake Charles; Commandant, Cadets at Gerstner Field; O.I.C. Interior Instruction, O.I.C. Flying, Gerstner Field; C.O. 352nd Aero Squadron, Roosevelt Field, Dec. 1918; discharged as Major, Air Service March 1919.

Flying Rating: Reserve Military Aviator, May 1918; Junior Military Aviator, Oct. 1918.

Present Occupation: Aviation Commissioner of Connecticut since April 1919; Lawyer.

Address: First National Bank Bldg.; home, 91 Bellevue Ave., Bristol, Conn.

Leonard Anderson Mack

MACK, LEONARD ANDERSON, Manufacturer; born, Wellmanville, Kans., Dec. 23, 1894; son of Orel Henry Mack and Sarah Emaline (Anderson) Mack; married, Helene Seeger, Nov. 9, 1920.
Educated: Grammar and high schools; two years college.

Professional: Standard Oil Co.; with saw mill company.

Aeronautical Activities: Ground School, University of California, May 1918; training at Camp Dick and Post Field.

War Service: Army, May 1918 to Dec. 1918.

Present Occupation: Fruit Growers Supply Co. (Saw Mill).

Address: P. O. Box 1003, Susanville, Calif.; home, 428 Hill St., Reno, Nev.

John Lloyd Manley

MANLEY, JOHN LLOYD, Deputy Collector of Internal Revenue; born, Primghar, Iowa, Aug. 26, 1895; son of J. W. Manley and Minnie M. Manley; married, Doris C. Rix, Oct. 26, 1919.
Educated: Milbank public school; University of South Dakota.

Professional: County Highway Superintendent, 1919-1920; Deputy Collector of Revenue, 1920 to date.

Aeronautical Activities: Has flown Farman, Liberty, Avion Renault, Avro, Curtiss, Sopwith, and Niuport.

Flying Rating: French Brevet.

War Service: U. S. Army Aviation Section, Aug. 1917 to Feb. 1919.

Present Occupation: Deputy Collector of Internal Revenue.

Address: Revenue Office, Aberdeen, S. Dak.; home, Milbank, S. Dak.

Charles Matthews Manly

MANLY, CHARLES MATTHEWS, Engineer; born, Staunton, Va., April 24, 1876; son of Charles Manly and Mary Hellen (Matthews) Manly; married, Grace Brayton Wishart, June 9, 1904.

Educated: Private schools in Greenville, S. C.; Master Mathematics, 1896, Furman University, Greenville, S. C.; M. E., 1898, Cornell University.

Professional: June 1898 to April 1905, Chief Assistant to Dr. S. P. Langley in aviation development work and the construction and test of the man carrying aeroplane for U. S. War Department; Vice President and Chief Engineer, Manly Drive Co., 1906-1915; President, S. A. E., 1919; Chairman, aviation division, S. A. E., standards committee, 1917-1919.

Aeronautical Activities: See Langley Memoir on Mechanical Flight; flew 150 feet, Oct. 7, 1903; one of the judges, International Aviation Tournament, Belmont Park, Oct. 1910; Member Contest Committee, Aero Club of America, 1906-1915; Consulting Engineer to British War Office Aviation Section, June to Sept. 1915; Consulting Engineer and Chief Inspection Engineer, Curtiss Aeroplane and Motor Corp. Sept. 1915 to May 1919; Asst. Gen'l Manager, May 1919 to Feb. 1920.

War Service: Member, American Aircraft Board Commission to International Aircraft Standardization Conference, London, 1918; member, International Aircraft Standards Board, 1917-1918.

Books: "Langley Memoir on Mechanical Flight", published as Part III of Vol. 27, Smithsonian Contributions to Knowledge.

Member: Aero Club of America; Society of Automotive Engineers; American Society of Mechanical Engineers; Engineer's Club of New York; Cosmos Club (Wash.).



Charles M. Manly

Present Occupation: Consulting Engineer (firm of Manly & Veal).
Address: 250 West 54th St., New York City; home, 210 Abingdon Road, Kew Gardens, Long Island, N. Y.

Samuel Herbert Mapes

MAPES, SAMUEL HERBERT, Capitalist; born, Hillburn, N. Y., April 28, 1882; son of Samuel Strong Mapes and Hannah (Conkling) Mapes; married, Julia Pierson, July 11, 1906.

Educated: High school of Hillburn, N. Y.; Herbert Academy, Suffern, N. Y.

Aeronautical Activities: C. O., 66th Aero Squadron, Kelly Field; C. O., 1st Group, 2nd Wing, Kelly Field; C. O., 2nd Wing; C. O., 380th Aero Squadron, Selfridge Field; Personnel Adjutant, 1st Training Brigade, Mineola, L. I.

War Service: Captain, Air Service, U. S. Army.

Books: "Mapes History"; "Cryptic Scroll".
Member: Union League Club; War of 1812; Sons of Revolution; Military Order of Foreign Wars.

Present Occupation: Capitalist.
Address: 1 East 39th St., New York, N. Y.

Miner Carey Markham

MARKHAM, MINER CAREY, born, Ripley, N. Y., Oct. 6, 1896; son of Frank Manly Markham and Mary Grace (Miner) Markham.

Educated: Hamilton High School, N. Y.; A. B. 1921, Princeton University.

Professional: Newspaper Reporter, Albany New York and Toronto, Canada, 1915, 1916.

Aeronautical Activities: S. M. A., Cornell University, June to Aug. 1917; flying schools, Mt. Clemens, Mich., Mineola, L. I., Issoudon and Tours, France, 1917 and 1918; pilot, 99th Aero Squadron, June 1918 to March 1919.

Flying Rating: Reserve Military Aviator, Dec. 1917.

War Service: 1917-1919.

Present Occupation: Student at Princeton University.

Address: Princeton; home, Cobleskill, N. Y.

James Andrew Mars

MARS, JAMES ANDREW, Lt. Col. U. S. Army; born, Galesburg, Illinois, April 10, 1878; son of Hiram Mars and Elizabeth Harrison (Smith) Mars; married, Marion Elizabeth Burr, Nov. 3, 1906.

Educated: Graduate of grade and high schools, Galesburg, Illinois; A.B., 1899 Knox College; U. S. Military Academy, class of 1903; Graduate of Mounted Service School, Ft. Riley, Kansas, class of 1916; General Staff College, Washington, class of 1921.

Professional: Commissioned officer, U. S. Army, since June 1903.

Aeronautical Activities: On duty with Aviation Section, Signal Corps, Washington, D. C. Dec. 10, 1917 to Jan. 1, 1918; established and Commanded Aviation General Supply Depot, Fairfield (Dayton), Ohio, Jan. 1 to Nov. 12, 1918;

in charge of supply for Group 1 Flying Fields, June to Nov. 1918; Assistant to Chief of Supply Group, Military Aeronautics, and officer in charge of Demobilization for Military Aeronautics, Washington, D. C., Nov. 13 to Dec. 15, 1918; Director of Aircraft Production, Dec. 15, 1918 to Oct. 20, 1919; command of Aviation General Supply Depot, Middletown, Pa., Oct. 20, 1919 to Aug. 14, 1923; General Staff College, 1921.

War Service: Philippine Islands, Department of Luzon, 1903 to 1906; Philippine Islands, Department of Mindanao, 1909 to 1912; American Punitive Expedition into Mexico, 1916; World War, 1917 to 1918.

Member: Army and Navy Club (Wash.); Army and Navy Club of America (N. Y.).

Address: Adjutant General, U. S. Army, Washington, D. C.; home, Washington, D. C.

Harold F. Marshall

MARSHALL, HAROLD F., Advertising; born, Brooklyn, N. Y., July 15, 1896; son of Robert A. Marshall and Gertrude (Hardwick) Marshall.

Educated: Cranford High School, Cranford, N. J.; 1913-1914, Lafayette; 1915-1917, Mass. Inst. of Tech.; 1919, Grenoble University.

Professional: Engineering 1914-1915; Army Air Service, 1917-1919; publishing business, 1920-1921; advertising, 1921-22.

Aeronautical Activities: Assistant in Mechanical Engineering Department, Wright-Martin Aircraft Corp., 1916; studied Aerodynamics at M. I. T., 1916-1917; advanced flying instruction at Issoudun, France, 1918; after Armistice with Army of Occupation acting as Motor Transport Officer; lectured for service school on work of observation service; 1919, with Aeromarine Co. on flying boat design.

Flying Rating: Reserve Military Aviator, Oct. 4, 1917.

War Service: June-Aug. 1917 S. M. A. Mass. Inst. of Tech.; Aug.-Oct. Hazelhurst Field as student pilot; Jan. 1918 to A. E. F. for advanced training at Issoudun; June 1918 to Feb. 1919 with 88th Aero Sqdn. on front and in Army of Occupation in Germany; returned to U. S. A. and discharged Aug. 1919.

War Honors: Citation, First Army Air Service, Dec. 31, 1918.

Member: Aero Club of America; Junior, American Society of Mechanical Engineers.

Present Occupation: Advertising.

Address: 85 Orange St., Brooklyn, N. Y.

R. C. Marshall

MARSHALL, R. C., Air Mail Pilot; born, Jewell, Tex., Feb. 2, 1893; son of Joe Marshall and Fannie Marshall; married, Kathryn Dyer, July 17, 1917.

Educated: Public schools of Gordon, Tex.

Professional: Telegraph operator, 1909-1914.

Aeronautical Activities: Exhibition pilot in South, 1914-1916; Thomas Bros. Aircraft Co. and Thomas-Morse Airplane Corp., 1916 to 1919; from 1917 to 1919 as test pilot; Aug. 1920, commercial flying in New York, Pennsylvania and Florida; Sept. 1920 to date, Air Mail Pilot.

Member: Vice President and Treasurer, Air

Mail Pilots Association

of America.

Present Occupation: Air Mail Pilot.

Address: Air Mail Field; home, 901 South 2nd Ave., Maywood, Ill.

Frederick LeRoy Martin

MARTIN, FREDERICK LEROY, Major, Air Service; born, Liberty, Ind., Nov. 26, 1882; son of John Charles Martin and Nancy Jane Martin; married, Grace Margaret Griffiths, June 26, 1912.

Educated: Liberty High School, 1904; B.S. in M.E. 1908, Purdue University.

Professional: Appointed 2nd Lieut., C. A. C., 1908; 1st Lieut., C.A.C., 1911; Capt., C.A.C., 1916; Major, Air Service, 1920.

Aeronautical Activities: U. S. Air Service.

War Service: Served with Supply Division, Oct. 1917 to Aug. 1918, also from Feb. 1919 to Aug. 1920; overseas, O. C. of A.S., Aug. 1918 to Jan. 1919.

Present Occupation: Major, Air Service.

Address: Chanute Field, Rantoul, Ill.

Glenn L. Martin

MARTIN, GLENN L., Airplane Manufacturer; born, Macksburg, Iowa, Jan. 17, 1886; son of Clarence Y. Martin and Minta (De Long) Martin.

Educated: Salina, (Kans.) public and High School, Kansas Wesleyan University.

Professional: Automobile business before 1908. Since then constructor of airplanes.

Aeronautical Activities: Began in 1907 to build gliders; 1908, designed and built pusher type airplane and taught self to fly; 1909, established one of the first airplane factories in the U. S.; flew regularly during 1909-1911; constructed airplanes of various types including monoplanes and water aircraft.

In order to secure funds for further development of designs gave many exhibition flights in various parts of U. S. and Canada; qualified for F. A. I. Aviators Certificate Aug. 10, 1911; Qualified for F. A. I. Expert Aviators Certificate No. 2 on Oct. 2, 1912; incorporated, Glenn L. Martin Company at Santa Anna, Calif., 1911; moved factory to Los Angeles, 1912; built airplanes for exhibition flying and sport use until 1913 when first order was received from War Department for Model T.T., which was later adopted by the Army for training purposes; 1914-1916, produced several new models for U. S. Army and built for the governments of Holland and Netherlands East Indies, twenty-four airplanes (these were models "T.A.", "S" and "R"); 1917, factory was employing about 150 men constructing aircraft; merged interests with Wright Company, resulting in the Wright-Martin Aircraft Corporation of New York; 1917, withdrew from Wright-Martin Co. and organized the Glenn L. Martin Co. of Cleveland; designed and built Martin Bombers, the first American designed airplane for Liberty engines; new plant with 72000 sq. ft. of floor space completed at Cleveland, 1918; Company has 415 men working at 52 different trades producing Martin Bombers for U. S. Army, Navy and Post Office; flying field adjoins factory.

Flying Rating: Taught self to fly 1908; Holds Aviation Certificate No. 56; Expert Aviators Certificate, No. 2, Aero Club of America.

War Service: Builder of airplanes for Army and Navy.

Honors: Diamond Medal for over ocean flight from Newport to Catalina (Calif.) 1912.

Member: Aero Club of America; Union Club (Cleveland); Ex-Vice-President, S. A. E.; Los Angeles Athletic Club.

Present Occupation: President, Glenn L. Martin Co.

Address: 16800 St. Clair Ave.; home, 2717 Euclid Boulevard, Cleveland, O.



Glenn L. Martin

Charles Frederick Marvin

MARVIN, CHARLES FREDERICK, Chief U. S. Weather Bureau; born, Putman now part of Zanesville, Ohio, Oct. 7, 1858; son of George Frederick Adams Marvin and Sarah Ann (Speck) Marvin; married, Nellie Limeburner, June 27, 1894 (Died, Feb. 27, 1905); Retta Mabel Bartholow, Nov. 8, 1911.

Educated: Public Schools Columbus, Ohio; Graduate of Mechanical Engineering, Ohio State University, 1883.

Professional: Sept 1, 1884, appointed Junior Professor in Office of Chief Signal Officer of the Army; assigned to charge of Instrument Division or Weather Bureau, 1888, until appointed Chief of Weather Bureau, Aug. 4, 1913.

Aeronautical Activities: The invention and development of kites and related aerial apparatus for exploration of the free air; Commissioned by the President as a member of the National Advisory Committee for Aeronautics; member of the Executive Committee thereof, also of Committee on Aerodynamics; Chairman of Committee on aircraft materials.

Books: Numerous articles on Meteorology in general, including theoretical and practical, papers on the use of kites in the exploration of the air, and other related subjects.

Member: Cosmos Club, (Wash.); Fellow of the American Ass'n. for the Advancement of Science, Philosophical Society of Washington, D. C.; Washington Academy of Sciences; Seismological Society of America; American Meteorological Society.

Present Occupation: Chief of U. S. Weather Bureau.

Address: 24th & M Sts., N. W., Washington, D. C.; home, 1501 Emerson St., N. W., Washington, D. C.



James A. Mars

Harry J. Marx

MARX, HARRY J., Consulting Aeronautical Engineer; born, Brooklyn, N. Y., June 1, 1893; son of Conrad Marx and Emma S. Marx; married, Augusta C. Schwinge, June 4, 1917.
Educated: Public schools of Brooklyn, N. Y.; University of Pennsylvania.
Professional: U. S. Navy Department, 1914-1915; U. S. War Department, 1916; Standard Aircraft Corp., 1917-1918; City College of New York, 1917-1920; Van Muffling & Marx, Consulting Aeronautical Engineers, since 1920; New York School of Aeronautics, 1920 to present.
Books: Aeronautical Courses for C.C.N.Y. and N.Y.S.A.
Member: Society of Automotive Engineers; A.A.E.; Aeronautical Society of C.C.N.Y.
Present Occupation: Consulting Aeronautical Engineer.
Address: 299 Madison Ave., New York City; home, 702 Chauncey St., Brooklyn, N. Y.

Thomas Kennedy Matthews

MATTHEWS, THOMAS KENNEDY, 1st Lieut., Air Service; born, Earlville, Iowa, Nov. 5, 1895; son of Dr. T. G. Matthews and Annie M. Matthews.
Educated: Public schools of Missoula, Mont.; high school, Butte, Mont.; University of Montana.
Aeronautical Activities: Air Service Ground School, University of California, Feb. 1918; primary and advanced flying training, Rockwell Field; commissioned, July 6, 1918; overseas, Sept. 1918 to July 1919; advanced pursuit training, 3rd aviation instruction center, Issoudun, France; member 28th Pursuit Squadron, 3rd and 2nd Pursuit Groups, Dec. 5, 1918 to April 30, 1919; Mitchel Field and Kelly Field, July 20, 1919 to Oct. 1920; commanding 95th Pursuit Squadron, 1st Group from Oct. 1920 to date.
Flying Rating: Airplane Pilot.
War Service: Army, May 30, 1917 to July 1, 1917; Aviation Cadet, S.E.R.C., Nov. 1, 1917 to July 6, 1918; 2nd Lieut., Air Service to July 1, 1920; 1st Lieut., Air Service to date.
Present Occupation: Commanding, 95th Pursuit Squadron, 1st Group, Kelly Field, Tex.; temporary duty, Operations Officer, 1st Provisional Pursuit Squadron, Langley Field, Va.
Address: 804 Chestnut Street, Missoula, Mont.

Erwin Emil Maurer

MAURER, ERWIN EMIL, Commercial Aviation; born, New York City, July 4, 1894; son of Emil F. Maurer and Lucy B. (Hardy) Maurer.
Educated: Yonkers High School; one year, Amherst College; three years, Stevens Institute of Technology.
Professional: With Otis Elevator Co., R. W. Hunt and Co., Corn Exchange Bank, Wittemann Aircraft Corp.
Aeronautical Activities: Training at Camp Dick, Princeton Ground School, Taylor Field, Kelly Field No. 2.
Flying Rating: Reserve Military Aviator.
War Service: U. S. Army Air Service.
Present Occupation: Purchasing Agent, Wittemann Aircraft Corp.
Address: Hasbrouck Heights, N. J.; home, 64 Ludlow St., Yonkers, N. Y.

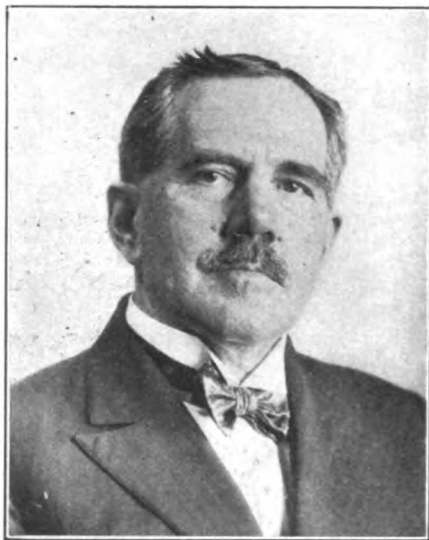
John Wesley Maxcy

MAXCY, JOHN WESLEY, Physical Instructor; born, Peru, Nebr., Feb. 20, 1894; son of John Wesley Maxcy and Delilah A. Maxcy.
Educated: Academy at McPherson College; A.B., McPherson College; Peru State Normal; Illinois State University.
Professional: Physical Director and Baseball Coach, McPherson College, 1915-1917, 1920.
Aeronautical Activities: S.M.A., Austin, Tex., Camp Dick, Barron Field, Post Field, 1917-1919; flying instructor, Barron Field; assistant engineering officer and chief test pilot, Post Field.
Flying Rating: Reserve Military Aviator, July 1918.
War Service: As above.
Member: Aero Club of America.
Present Occupation: Physical Director, Potsdam Normal Training School.
Address: 7 Lawrence Ave., Potsdam, N. Y.

George William Maxim

MAXIM, GEORGE WILLIAM, Commercial Aviation; born, Hallowell, Me., May 16, 1894; son of Bradley C. Maxim and Almida (Keith) Maxim; married, Laura Willock, July 14, 1920.
Educated: Public schools.
Professional: Machinist, 1911 to 1917, 1919 to 1920; commercial aviation, 1920 to 1922.
Aeronautical Activities: Oct. 1917 to Dec. 1918, flying training at Ground School of Military Aeronautics, Princeton, N. J., Park Field, Love Field, Gerstner Field, Rockwell Field and

Mitchel Field; Jan. 1919 to Nov. 1919, machinist at Curtiss Airplane factory, Garden City, L. I.; May 1920 to Nov. 1920, pilot for Waterbury Aviation Co., Waterbury, Conn.; May 1921 to Dec. 1921, pilot for Maxim Air Service Co., Waterville, Me.
Flying Rating: Reserve Military Aviator, April 4, 1918.
War Service: Army, Sept. 1917 to Dec. 1918.
Member: Aero Club of America.
Present Occupation: Commercial aviation.
Address: 5 Oak St., Waterville, Me.



Charles F. Marvin

Hiram Percy Maxim

MAXIM, HIRAM PERCY, Inventor; born, Brooklyn, N. Y., Sept. 2, 1869; son of Sir Hiram Stevens Maxim and Jane (Budden) Maxim; married, Josephine Hamilton, Dec. 21, 1898.
Educated: Public Schools, Brooklyn, N. Y.; 1886 Mass. Inst. of Technology.
Professional: Electrical and Mechanical engineering, Thomson Electric Welding Co., Westinghouse Electric and Mfg. Co., Electric Vehicle Co., Maxim Silencer Co., American Chain Co., etc.
Aeronautical Activities: 1911, flying experiments with gliders; several good flights but injured and had to stop; President, City of Hartford Municipal Aviation Commission; Member, Aviation Committee, Connecticut Chamber of Commerce.
Member: President, Aero Club of Hartford since 1911; Engineers, (N. Y.).
Present Occupation: President Maxim Silencer Co.
Address: 83 Homestead Ave., Hartford, Conn.; home, 276 No. Whitney St., Hartford, Conn.

Frederick Richard Maxwell, Jr.

MAXWELL, FREDERICK RICHARD, JR., Professor of Physics and Electrical Engineering; born, Tuscaloosa, Ala., June 15, 1889; son of F. R. Maxwell and Lucy Cochrane.
Educated: Tuscaloosa High School; B.S. 1911, University of Alabama; Mechanical Engineer 1912, University of Alabama.
Professional: Manager of Electrical Department, 1914, Manager, Gas Department 1915, Commercial Manager 1916, Assistant General Manager 1918, for Tuscaloosa Railway and Utilities Co.; Assistant Professor, Physics and Electrical Engineering, 1920, University of Alabama.
Aeronautical Activities: Student flyer, Oct. 1917; Naval Aviator, Feb. 1918; placed on Ground duty, May 1918; returned to Flight duty latter part of 1918.
Flying Rating: Naval Aviator No. 2125, Lieut. (j.g.) U.S.N.R.F.
War Service: U. S. Naval Reserve Corps, July 1917 to Feb. 1919.
Member: A.I.E.E.; Alabama Technical Association.
Present Occupation: Assistant Professor of Physics and Electrical Engineering.
Address: University, Ala.; home, 2703 Sixth St., Tuscaloosa, Ala.

Frank Rollins Maxwell, Jr.

MAXWELL, FRANK ROLLINS, JR., Shoe Business; born, Boston, Mass., April 9, 1888; son of F. R. Maxwell and E. W. Maxwell; married, Elma Lee Joffrion, May 28, 1916.

Educated: Public schools; Volkmann School, Boston; A. B. 1910, Harvard University.
Professional: Shoe manufacturing.
Aeronautical Activities: Trained as Naval Aviator (L. T. H.) at Pensacola, Fla. in 1918.
Flying Rating: Naval Aviator.
War Service: Commissioned Ensign, June 15, 1918; Lieut., Oct. 1, 1918; Aide-to-Commandant, U. S. Naval Air Station, Pensacola, Fla., June 15, 1918 to Jan. 15, 1919; communication officer and aide for information.
Member: Harvard Club of N. Y.; Eastern Yacht Club; Dedham Polo and Country Club; Union Boat Club.
Present Occupation: Shoe Manufacturing.
Address: 31 Court St., Dedham, Mass.

Roland George Mayer

MAYER, ROLAND GEORGE, Aeronautical Engineer; born, Seattle, Wash., April 20, 1892; son of Adam J. Mayer and Katherine B. Mayer; married, Mabel Lillian McClarren, Aug. 9, 1915.
Educated: Seattle grade schools; Broadway High School; B.S. in M.E. 1916, University of Washington.
Professional: General Machine work, 1908 to 1911; installation power plant work, 1911 and 1912; Foreman, machine shop, 1916-1917.
Aeronautical Activities: Experimental work on "Jannen" ornithopter, 1909, helicopter, 1910; Boeing Airplane Co. designer 1917; Bureau C. & R. Navy Department, Washington, D. C., Aeronautical Engineer, 1917-1918; Naval Aircraft Factory, 1919 to date as Assistant Chief Engineer.
War Service: Lieut. (j.g.) C.C. U. S. Navy, 1918 to date.
Present Occupation: Aeronautical Engineer, Naval Aircraft Factory.
Address: Naval Aircraft Factory, Philadelphia, Pa.; home, 2981 Yorkship Square, Camden, N. J.

George Jackson Mead

MEAD, GEORGE JACKSON, Automotive Engineer; born, Everett, Mass., Dec. 27, 1891; son of George Nathaniel Plummer Mead and Jenny (Lehman) Mead.
Educated: St. George's School, Newport, R. I.; Choate School, Wallingford, Conn.; M.I.T. 1911-1915.
Professional: Engineer, Sterling Engine Co., Buffalo, N. Y., 1916; Experimental Engineer, Simplex Automobile Co., 1916.
Aeronautical Activities: Wright-Martin Aircraft Corp., New Brunswick, N. J., 1917-1919; Engineer-in-charge, Power Plants Laboratory, U. S. Air Service, Dayton, Ohio, 1919; Chief Engineer, Wright Aeronautical Corp., Paterson, N. J., 1920 to date.
Member: Society of Automotive Engineers; American Society of Mechanical Engineers; Institution of Automobile Engineers, London England; Aeronautical Chamber of Commerce; Chairman of the Power Plants Sub Division of the Committee; Vice-Chairman, Aeronautic Div., S. A. E. Standard Com.; Chairman of the Power Plants Sub-Committee of the American Engineering Standards Committee on Aeronautical Safety Code.
Present Occupation: Chief Engineer, Wright Aeronautical Corp.
Address: 238 Lewis Street, Paterson, N. J.; home, 14 Carleton Place, Glen Rock, N. J.

Eugene Burlingame Mechling

MECHLING, EUGENE BURLINGAME, Student; born, Denver, Colo., March 5, 1897; son of David L. Mechling and Fannie (Burlingame) Mechling.
Educated: Clayton School and East Denver High School; 1915-1917, Electrical Engineering, University of Colorado; Mass. Inst. of Tech., 1919 to date.
Aeronautical Activities: U. S. School of Military Aeronautics, Berkeley, Calif.; primary flying training, Rockwell Field; formation flying, Payne Field; pursuit and gunnery instruction, Carlstrom and Dorr Fields; instructor in aerial gunnery, Carlstrom Field; Pilot, Johnson Aerial Transportation Co., Denver, Colo.
Flying Rating: Reserve Military Aviator; F. A. I. Pilot.
War Service: Army, Oct. 1917 to April 1919.
Present Occupation: Student.
Address: A. 403, Mass. Inst. of Tech., Cambridge, Mass.; home, 1143 Vine St., Denver, Colo.

C. LeRoy Meisinger

MEISINGER, C. LEROY, Meteorologist; born, Plattsmouth, Nebr., April 30, 1895; son of John B. Meisinger and Nannie (Antill) Meisinger; married, Helen B. Hilton, June 15, 1921.
Educated: Public and high schools of Lincoln, Nebr.; B.Sc. 1917, University of Nebraska; M.S. 1920, George Washington University.
Professional: Assistant Editor, *Monthly Weather Review*, U. S. Weather Bureau, Washington, D. C. since Sept. 2, 1919.

Aeronautical Activities: Free Balloon and Kite Balloon flying in connection with meteorological duties at Ft. Omaha, Nebr. and Ft. Sill, Okla., Jan. to July 1919; articles on aeronautical meteorology published in *Monthly Weather Review* and other periodicals.

Flying Rating: Spherical Balloon Pilot, license No. 828.

War Service: Enlisted June 2, 1917, 5th Nebraska (134th) Infantry to March 19, 1918; Science and Research Division, Signal Corps School of Meteorology, Waco and College Station, Tex. to Aug. 1918; transferred to Washington, D. C.; commissioned 2nd Lieut. Sig. Corps, Sept. 18, 1918; inspected meteorological stations at artillery and flying fields to Dec. 1918; Meteorologist in Charge, Army Balloon School, Ft. Omaha, Nebr., Jan. to July 1919.

Member: Fellow, American Meteorological Society; Philosophical Society of Washington; Sigma Xi.

Present Occupation: Meteorologist.

Address: Weather Bureau; home, 1320—21st St., N. W., Washington, D. C.

James Armand Meissner

MEISSNER, JAMES ARMAND, Steel Business; born, Londonderry, N. S. Canada, July 30, 1896; son of Carl August Meissner and Clara (Ayer) Meissner.

Education: Public school 139, Brooklyn, N. Y.; Erasmus Hall High School, Brooklyn, N. Y.; M. E. 1919, Cornell University.

Professional: Started work for Tennessee Coal, Iron and R. R. Co., Ensley Plant, Ala., Oct. 1919; still with same Co., learning steel plant operation.

Aeronautical Activities: Enlisted Cornell S. M. A., May 28, 1917; sailed for France, July 23; started flying training at Tours, France, Aug. 16; through Avord, Issoudun, Cazean; assigned 94 Pursuit Squadron, March 8, 1918; Toul sector April 14; Through Chateau-Thierry, St. Mihiel, Argonne, Drives; C. O. 147th Squadron, July 23, 1918; American Ace, Officially credited with destruction of 7 airplanes and 1 Balloon; commissioned 1st Lt., Dec. 12, 1917; Capt., Oct. 3, 1918; Major, Oct. 4, 1918.

Flying Rating: Reserve Military Aviator Dec. 12, 1917; Junior Military Aviator, Oct. 4, 1918.

War Honors: May 15, 1918, Croix de Guerre with Palm; another Palm, July; D. S. C. with Oak Leaf, Oct. 19, 1918.

Member: Aero Club of America; Birmingham Flying Club; Sons of American Revolution; Sigma Phi Epsilon Fraternity; Birmingham Country Club; Tau Beta Pi.

Present Occupation: Steel business, Birmingham, Ala.

Address: 2617 Bush Boulevard, Ensley, Alabama.



James A. Meissner

Phillips Melville

MELVILLE, PHILLIPS, 1st Lieut., Air Service; born, Boston, Mass., Nov. 18, 1895; son of Henry Hulme Melville and Marcia (Lord) Melville.

Education: Harrow School, Harrow-on-the-Hill, Middlesex, England, 1911-1915.

Professional: Student, National City Bank of New York (Foreign Trade Department), 1916-1917.

Aeronautical Activities: Enlisted, June 11, 1917; S.M.A., Austin, Tex., June 16 to Aug. 11, 1917; A. E. F., Sept. 11, 1917; Campo-sud, Foggia, Italy, preliminary and advanced flying, Oct. 16, 1917 to Aug. 5, 1918; Campo Cascina Malpensa, Gallarate, Italy, Aug. 7 to Sept. 6, 1918; R.A.F. School of Aerial Navigation, Worthy Downs, Winchester, England, Oct. 5 to Oct. 20, 1918; R. A. F. School of Night Bombardment, Stonehenge, England, Oct. 20 to Nov. 7, 1918; returned to U. S. Dec. 10, 1918; Hazelhurst and Mitchel Fields, Dec. 30, 1919 to Dec. 28, 1921; Langley Field, Dec. 1921 to date; piloted Caproni, New York-Toronto Race, 1919.

Flying Rating: Italian First Brevet, Dec. 20, 1917; Italian Superior Brevet, Jan. 19, 1918; Airplane Pilot, July 25, 1918.

Present Occupation: 1st Lieut., Air Service, Langley Field, Va.

Address: 19 West 31st Street, New York, N. Y.



Charles T. Menoher

Jesse Irving Menefee

MENEFEE, JESSE IRVING, Engineer; born, Clifton Forge, Va., April 7, 1890; son of Jerome C. Menefee and Abbe C. Menefee.

Education: W.A.I., Winona Lake, Ind.; A. M. A., Defiance, Va.; V.P.I., Blacksburg, Va.; M.E. 1912.

Professional: Draftsman, Designing Engineer, and Architectural Designer; entered first Ft. Myer Training Camp; transferred to Aviation upon completing training.

Aeronautical Activities: Entered Georgia Tech. Ground School, July 1917; ordered to Chandler Flying Hydroplane School at Essington, Pa., Oct. 1917; transferred to Kelly Field No. 2, Sept. 1917 to finish training; transferred to Barron Field, instructed in acrobatics and cross country; Sept. 1918, transferred to Bolling Field, in charge of Dual Instruction.

Flying Rating: Reserve Military Aviator; Aero Club of America certificate No. 3284, Dec. 4, 1918.

War Service: As above.

Member: Aero Club of America.

Present Occupation: Wiley & Wilson, Consulting Engrs.

Address: Peoples Bank Bldg.; home, Y.M.C.A., Room 15, Lynchburg, Va.

Charles Thomas Menoher

MENOHER, CHARLES THOMAS, Major General, U. S. Army; born, Johnstown, Penn., March 20, 1862; son of Samuel Menoher and Sarah Jane (Young) Menoher; married, Nannie W. Pearson, Oct. 10, 1889.

Education: Public schools, Johnstown; U. S. Military Academy, 1886.

Professional: Served in the Regular Army in every grade, in order, from 2nd Lieutenant to Major General.

War Service: Sailed for France on July 31, 1917, in command of the 5th Field Artillery (Regular); was appointed Brigadier General, National Army, Aug. 5, 1917, and Major General, National Army, Nov. 28, 1917; Commanded school of instruction for field artillery at Saumur, France Sept. 5 to Dec. 14, 1917; commanded 42d (Rainbow) Division from Dec. 19, 1917, to Nov. 10, 1918; commanded sixth Army Corps from Nov. 10, 1918, until return to the United States, Dec. 17, 1918; while in command of the 42d Division participated in the following engagements: Contact with Enemy in Luneville and Baccarat sectors, Feb. 17 to June 21, 1918; Champagne-Marne offensive in Champagne by the Germans, July 15 to 18; Attack above Chateau-Thierry, from the vicinity of Epieds across the Ourcq to Cherry Chartreuse south of the Vesle, July 24 to Aug. 2; Attack on St. Mihiel salient, Sept. 12 to 14, and in occupation of the sector to Oct. 1, 1918; Attack on Argonne from Oct. 12 to Nov. 8, 1918.

Aeronautical Activities: Director of Air Service, Jan. 2, 1919, to July 1, 1920; Chief of Air Service, July 1, 1920, to date.

War Honors: Distinguished Service Medal; Victory Medal with five clasps (one for each major operation in which the division was engaged); Croix de Guerre with Palm by French Government; Commander Legion of Honor by French Government; Commander Belgium Legion of Honor (Order of King Leopold).

Member: Army and Navy Club (Wash.); American Legion; Veteran of Foreign Wars; Fellow of the American Meteorological Society; various Aero Clubs and Service Clubs.

Present Occupation: Major General, U. S. Army.

Address: Air Service, Washington, D. C.; home, 1820 S Street N. W., Washington, D. C.

Charles E. Merrill

MERRILL, CHARLES E., Banker; born, Green Cove Springs, Fla., Oct. 19, 1885; son of Charles M. Merrill and Octavia (Wilson) Merrill; married, Eliza Joyce Church, April 8, 1912.

Education: Jacksonville, Fla., Public schools; Worcester Academy; Amherst College, 1904-1906; University of Michigan, 1906-1907.

Professional: Patchogue Plymouth Mills, 1907-1909; George H. Burr Co., 1909-1913; established present business, 1913.

Aeronautical Activities: U. S. S. M. A., Austin, Tex., Feb.-Mar. 1918; Kelly Field, Mar.-Aug. 1918; Carlstrom Field, Sept.-Oct. 1918; Dorr Field, Nov.-Dec. 1918.

Flying Rating: R. M. A., Aug. 28, 1918; Airplane Pilot, Dec. 14, 1918.

War Service: Commissioned 1st Lieut. 319 Inf. upon completion of 1st O.T.C., Aug. 15, 1917; transferred to Air Service, Feb. 15, 1918; discharged, Dec. 10, 1918.

Member: Montclair Golf Club; Essex County Country Club; Detroit Athletic Club; City Club, etc.

Present Occupation: Merrill, Lynch & Co. **Address:** 120 Broadway, New York City; home, 120 Clinton Ave., Montclair, N. J.

Russel Hyde Merrill

MERRILL, RUSSEL HYDE, Chemical Engineer; born, Des Moines, Iowa, April 8, 1894; son of Samuel A. Merrill and Fannie R. Merrill.

Education: West Des Moines High School; Grinnell College, Grinnell, Iowa; Bachelor of Chemistry, 1919, Cornell University.

Professional: With Crown Williamette Paper Co., 1919 to date.

Aeronautical Activities: Ground School, Naval Aviation Detachment, M. I. T., Cambridge, Mass., Oct. 1917 to Jan. 1918; flying training, Key West, Fla., 1918; Acting Chief Pilot at Cape May, N. J., during last six months of active duty.

Flying Rating: Naval Aviator No. 469.

War Service: U. S. Naval Flying Corps.

Member: Aero Club of America; American Chemical Society.

Present Occupation: Chemical Engineer.

Address: Crown Williamette Paper Co., Floriston, Calif.; home, R.F.D. Box 77, Menlo Park, Calif.

Walter William Meyer

MEYER, WALTER WILLIAM, Commercial Aviator; born, Chicago, Ill., March 21, 1890; son of Caroline Meyer; married, Laurel Doremus, April 8, 1918.

Education: Public schools, Chicago, Ill.; University of Illinois.

Professional: National Biscuit Co., 1908 to 1910; National Packing Co., 1910 to 1913; Butler Auto Co., 1914; Directory Advertising, R. H. Donnelly, 1914 to 1917.

Aeronautical Activities: Ground school, Urbana, Ill. Oct. 1917; Rich Field, Waco, Tex. for primary training; Ellington Field, Houston, Tex. for bombing pilot training, May 1918; graduated as night bombing pilot; made instructor on acrobatic stage, Jan. 1919; in charge of the De Havilland Transformation Stage until transferred to Kelly Field, Sept. 1919; took the engineering

course at A.S.M.S.; became engineer officer of the 166th Squadron, later C.O.

Flying Rating: Reserve Military Aviator, April 3, 1918; A. C. of A. Aviator's certificate.

Present Occupation: General Manager of the Eastern Airways Corp. now organizing to operate a line of large ships between Chicago and New York.

Address: 5427 Prairie Ave., Chicago, Ill.

Edwin Rickards Michie

MICHIE, EDWIN RICKARDS, Executive; born, Calcutta, E. India; son of John Shaplan Michie and Katharine (Rickards) Michie; married, Mabel G. Sylvester, Jan. 16, 1904.

Education: Private Schools; E.M., Truro S. M. Dulwich College, Cambridge University, England.

Professional: General Manager, Northern Pyrites Co.; Vice Pres., Sylvester Manufacturing Co. (implements and motors); Vice President, Ordnance Engineering Corp.

Aeronautical Activities: Manufacturing airplanes for U. S. Government and civilians.

Member: Lawrence Park C.C.; New York Athletic Club; S. A. E., Aero Club of America.

Present Occupation: Vice President, Ordnance Engineering Corp.

Address: 120 Broadway, N. Y.; home, 440 Pelham Manor Road, Pelham, N. Y.

Carl A. Miller

MILLER, CARL A., Banking Business; born, East Millstone, N. J., July 31, 1891; son of August C. Miller and Carolyn P. Miller; married, Charlotte Sanford Baker, Nov. 3, 1915.

Education: Peekskill Military Academy; B.S. 1911, New York University; C.E. 1912, New York University.

Professional: One year as Assistant Instructor in Engineering in New York University; automobile business in Cincinnati, Ohio; 1913, American Telephone & Telegraph Co., New York; 1920, Assistant Manager, Business Extension Department, Irving National Bank, New York, 1920 to date.

Aeronautical Activities: Entered U. S. Air Service, Sept. 1917 and was detailed for service in the Office of the Director of Military Aeronautics at Washington as Executive Officer of the Section in Charge of Training the enlisted Mechanics Personnel for the Air Service; assisted in organization of enlisted Mechanics' Training School, St. Paul, Minn.; flying training, beginning March 1918, Bolling, Langley and Chanute Fields; continued flying at various fields until discharged from the Army.

Flying Rating: Reserve Military Aviator, Jan. 1919.

War Service: Commissioned 1st Lieut., Signal Corps, U. S. Army and assigned to Air Service, Sept. 1917; promoted to Captain, Aug. 1918; discharged, Jan. 1919 as Major of the Reserve Corps.

Member: Ardsley Club, Ardsley-on-the-Hudson.

Present Occupation: Assistant Manager, Business Extension Department, Irving National Bank.

Address: 233 Broadway; home, Dobbs Ferry, N. Y.

Euclid Dennis Miller

MILLER, EUCLID DENNIS, Oceanic Cables; born, Rock Island, Tenn., Nov. 1, 1885; son of William V. D. Miller and Emma (Dunlap) Miller; married, Wanda McCauley, Nov. 4, 1919.

Education: Public schools, McMinnville, Tenn.; Holbrook Prep. School and Burrill College.

Professional: Telegrapher and newspaper man 1905-1916; army, 1917-1919; 1919 to date, with Cuban-American Telephone Co., Havana, Cuba.

Aeronautical Activities: May 1918 to July, Post Field; observers school at Selfridge Field, July-Sept., 1918; Oct.-Nov. 1918, at the observers school, Tours, France.

Flying Rating: Aerial Observer, Sept. 1918.

Member: American Legion.

Present Occupation: Maintenance of communication over Havana-Key West cables.

Address: Box 945, Cuban-American Telephone and Telegraph Co., Havana, Cuba; home, Rock Island, Tenn.

John William Miller

MILLER, JOHN WILLIAM, Consulting, Civil and Aeronautical Engineer; born, Dawson, Ill., Feb. 22, 1880; son of John H. Miller and Ida A. (Nichols) Miller; married, Florence Lovetinsky, 1909.

Education: Public schools of Friend, Nebr.; B.Sc. Civil and Mechanical Engineering, 1905, University of Nebraska.

Professional: Expert Mechanic, McCormick Harvesting Machine Co., 1896-1897; Consulting Engineer, City of Friend, Nebr., 1903; Assistant Engineer, Chicago & Northwestern Ry., 1905-

1906; Locating Engineer, C. B. & Q. R. R., 1907; Tester, Cushman Motor Co., Lincoln, Nebr., 1908; Division Engineer, C. B. & Q. R. R., 1909; Assistant Professor, Civil Engineering, University of Washington, 1909-1919; in charge of part of survey of Camp Lewis Cantonment, 1917; Chief Engineer, Boeing Airplane Co., July 1917 to Jan. 1919; Professor in charge of Aeronautics, University of Washington, 1919; Consulting Engineer, American Aircraft Corp., 1920; President and Chief Engineer, J. W. Miller Aircraft Corp., Seattle, Wash., June 1920 to date.

Aeronautical Activities: Built and flew gliding machines, 1895-1905; did photographic reconnaissance surveying from own plane 1909; lectured on aeronautics and did experimental work, 1909-1917; Chief Engineer on development of plant of Boeing Airplane Company and in design of aircraft, 1917-1919; designed sport plane for American Aircraft Corp., 1920.

Member: Assoc. Member, American Society of Civil Engineers; Honorary Member, Aero Club of the Northwest; Automobile Club of Western, Wash.; Elks Club; Kappa Sigma.

Present Occupation: President and Chief Engineer, J. W. Miller Aircraft Corp.

Address: 8664-10th Ave., N. E., Seattle, Wash.



Thomas DeW. Milling

Leland Wilbur Miller

MILLER, LELAND WILBUR, 1st Lieut., Air Service; born, Galesburg, Kans., Nov. 26, 1894; son of Robert Ellis Miller and Ada Moore (Dennis) Miller; married, Marjorie Dee, March 7, 1919.

Education: High school, Omaha, Nebr.; Electrical Engineering, Purdue University.

Aeronautical Activities: Ground School, Austin, Tex., Nov. 1917 to Jan. 1918; special mapping course, Rockwell Field, 1918; photographic and mapping work, 1918, 1919, 1920; bombing at Langley Field, 1921.

Flying Rating: Reserve Military Aviator, Aug. 1918; Airplane Pilot.

War Service: 1st Officer's Training Camp, Fort Snelling, Minn., May 1917 to Aug. 1917.

Present Occupation: Instructor, U. S. Army School of Aerial Photography.

Address: Langley Field, Va.

Ray S. Miller

MILLER, RAY S., Commercial Aviator; born, Van Wert, Ohio, Aug. 14, 1891; son of John N. Miller and Anna B. Miller.

Education: Public schools of Van Wert, Ohio; one year, Fremont College, Nebr.

Professional: Manager, family estate, 1909-1916; 1916-1921, Civilian and Army Aviator.

Aeronautical Activities: Civilian flier, 1916-1917; army flier, 1917-1918; Chief Pilot for Curtiss N. W. Airplane Co., 1919-1921.

Flying Rating: Reserve Military Aviator.

War Service: Army, Dec. 1917 to March 1919.

Present Occupation: Chief Pilot for Curtiss N. W. Airplane Co.; Maj. in Command, Minn. National Guard Aero Squadron.

Address: 707 Met. Bank Bldg.; home, 3133 Calhoun Blvd., Minneapolis, Minn.

Roy Gilman Miller

MILLER, ROY GILMAN, Aeronautical Engineer; born, Peoria, Ill., June 24, 1893; son of Maj. Charles Dana Miller and Mary (Murdoch) Miller; married, Muriel MacGregor, Sept. 4, 1918.

Education: Public schools of Newark, Ohio; B.S. 1916, Case School of Applied Science.

Professional: Packard Motor Car Co., Detroit, Mich., 1916-1917.

Aeronautical Activities: Aviation Section, Signal Corps, June 1917; Flying Officer, Jan. 1918 to Jan. 1919; student in post-graduate course in Aeronautical Engineering, M.I.T., May to Sept. 1918; instructor in post-graduate course in Aeronautical Engineering, M.I.T., Oct. 1918 to Jan. 1919; member of Technical Staff, National Advisory Committee for Aeronautics, Langley Field, Sept. 1919 to Feb. 1921; Aeronautical Engineer with Naval Aircraft Factory, Philadelphia, Pa., Feb. 1921 to date.

Flying Rating: Reserve Military Aviator, Jan. 1918.

War Service: Army, May 1917 to Jan. 1919.

Member: Society of Automotive Engineers.

Present Occupation: Aeronautical Engineer.

Address: Naval Aircraft Factory, Philadelphia, Pa.; home, 225 Pennsylvania Road, Brooklawn, N. J.

Thomas DeWitt Milling

MILLING, THOMAS De WITT, Major, Air Service; born, Winfield, La., July 31, 1887; son of Robert E. Milling and Ida (Roberts) Milling.

Education: Public schools of Franklin, La.; U. S. Military Academy.

Professional: 1909, U. S. Military Academy; 2nd Lieut., 15th Cavalry, Sept. 1909 to April 1911; on duty with Aviation Section, Signal Corps, as 1st Lieut., Captain, and Major, to Aug. 1917; Lt. Col. and Col., Air Service to April 1920.

Aeronautical Activities: On continuous aeronautical duty since April 1911; received instruction in flying at Wright School, Dayton, Ohio, 1911; assisted in establishing First Army Aviation School, College Park, Md., 1911; instructor in flying, 1911, 1912, and 1913; entered International Meets, Boston and New York, 1911, broke world's endurance record, carrying two passengers, also won Tri-State Race, one of the longest cross-country events at that time; successfully conducted tests in the observation of artillery fire from airplane, using both radio and dropped messages, at Fort Riley, Kansas, 1912; served with the First Aviation Detachment, stationed at Texas City, Tex., for expected service in Mexico, 1913; established a new American Air Service distance and endurance record, with passenger, by making a non-stop flight at San Antonio, Tex., distance 220 mi., return flight made in same manner, 1913; Officer in Charge of flying training, Army Aviation School, San Diego, Calif., 1913; on duty in France, Germany, Austria, and England, attending foreign aviation schools and studying aeronautical conditions in Europe, fall of 1913, spring of 1914; served with First Aero Squadron, Galveston, Tex., 1914; commanded Aviation Detachment on Mexican Border, Brownsville, Tex., 1915; Officer in Charge of flying training, Army Aviation School, San Diego, Calif., 1914 and 1915; served with First Aero Squadron, Fort Sill, Okla. and San Antonio, Tex., 1915; conducted tests on first automatic camera from airplane, 1915; Officer in Charge of flying training, War Department, 1916-1917; organized first flying school for instruction of Reserve Military Aviators, 1916; Chief of Air Service Training, A. E. F., 1917; member of Training Section, General Staff A. E. F., 1918.

Flying Rating: Pilot's Certificate No. 30, July 6, 1911; Expert Aviator's Certificate No. 3, Sept. 1911; first Military Aviator, U. S. Army, July 5, 1912; Junior Military Aviator, July 22, 1914; Military Aviator, Aug. 8, 1917; Airplane Pilot, Oct. 5, 1920.

War Service: Chief of Air Service Training, A. E. F., Sept. 3, 1917 to Jan. 3, 1918; member of Training Section, General Staff, A. E. F., to June 4, 1918; Commanding Officer, American Air Service Units, Toul Sector, to Aug. 24, 1918; Chief of Staff, Air Service, First Army, to Oct. 18, 1918; Chief of Air Service, First Army, to Jan. 25, 1919; returned to U. S., Feb. 1919; Assistant to Chief of Training and Operations, Air Service, March 1919 to June 1920; Officer in Charge, Air Service Field Officer's School, 1921.

War Honors: Awarded Distinguished Service Medal; Chevalier of the Legion of Honor, by France; Officer of the Order of Leopold, by Belgium.

Member: Chevy Chase Club; Racquet Club; Army and Navy Club (Wash.); Aero Club of America; Society of Automotive Engineers.

Present Occupation: Officer in Charge, Air Service Field Officers School, Langley Field, Va.

Address: Langley Field, Va.

Harry Bowers Mingle

MINGLE, HARRY BOWERS, Lawyer; born, Lock Haven, Pa., April 18, 1876; son of Sampson Quiggle Mingle and Rosanna (Bowers) Mingle; married, Millicent Brown Dyer, June 2, 1906.

Educated: Dickinson Seminary, Williamsport, Pa. Director of same: 1899, B.S. in Economics, University of Pennsylvania; 1902, LL.B., New York Law School.

Professional: Since 1899 has been continuously engaged in law practice, specializing upon Corporation law; between 1899 and 1903 was organizer, incorporator, and director of the Depew and Lake Erie Water Co., the Western New York Water Co., and Lake Ontario Water Co.; at one time was president of these companies; was incorporator and director of the Cochrane Land Co., and the Cranford Development Co.; director of the State Trust Company of New Jersey.

Aeronautical Activities: 1916, acquired an interest in the Standard Aero Corp. and afterward was made its president; out of this company grew the Standard Aircraft Corp.; was president and one of the organizers of Aircraft Manufacturer's Association; later, this was merged into the Manufacturers' Aircraft Association.

Member: University Clubs of Philadelphia and Washington; Lawyers Club; Lotos Club; Town Hall Club; Delta Upsilon Club; General Alumni Society of University of Pennsylvania; American Bar Association; State Bar Association; Essex County Country Club, Orange Lawn Tennis Club; Aero Club of New York; Society of Automotive Engineers; Academy of Political Science; Pennsylvania Society.

Present Occupation: Lawyer.

Address: 233 Broadway, New York City; home, Llewellyn Park, West Orange, N. J.

Howard L. Mingos

MINGOS, HOWARD L., Writer; born, Athens, Pa., April 21, 1891; son of George Wm. Mingos and Charlotte (Lynch) Mingos.

Educated: Public schools of Athens, Pa.; 1911-1914, Pennsylvania Museum and School of Industrial Art.

Professional: Newspaper reporter and special writer, 1911-1917; magazine contributor and illustrator; writer of articles and publicity on civil aviation since 1919.

War Service: U. S. Army, Infantry and Air Service, July 1917 to Dec. 1918.

Member: Aero Club of America; City Club of New York.

Present Occupation: Aeronautical Chamber of Commerce of America, Inc.

Address: 80 Washington Square, New York City.

William Mitchell

MITCHELL, WILLIAM, Brig. Gen., Air Service, U. S. Army; born, Nice, France, Dec. 29, 1879; son of John Lendrum Mitchell and Harriett (Danforth) Mitchell; married, Carolyn Stoddard, Dec. 2, 1903.

Educated: Private schools, Milwaukee, Wis.; Racine College; B.A. Columbia University; Distinguished Graduate, Army School of Line, 1908; graduate, Army Staff College, 1909.

Professional: Youngest officer in Army in Spanish War; Philippine Insurrection; Army of Cuban Occupation; Army of Cuban Pacification; Mexican Service; General Staff, Feb. 14, 1913, to June 7, 1916; World War Service, April 6, 1917, to Sept. 1, 1917, with airplane division as Military Observer and Aviation Officer, A.E.F.; Chief of Air Service, Zone of Advance, to Feb. 10, 1918; Chief of Air Service, First Corps, to June 25, 1918; Chief of Air Service, First Brigade, Air Service, to July 30, 1918; Chief of Air Service, First Army, to Oct. 18, 1918; Chief of Air Service, Group of Armies, to Nov. 11, 1918; returned to U. S. 1919; Chief of Training and Operations Air Service, 1919-1920; Assistant to Chief of Air Service, 1921.

Aeronautical Activities: First American officer under German fire in World War, first American flying officer to cross lines in European War on April 22, 1917; laid the basis for the tactical Air Service in Europe before the coming of the American Expeditionary Forces; commanded, Air Service of the First Army Corps, the Air Service of the First Army, the Air Service of the Group of Armies and, when the Group of Armies was discontinued, at the time of the Armistice, took the Aviation of the Army of Occupation into Germany, established it along the Rhine River.

War Honors: Awarded Distinguished Service Cross: "For repeated Acts of extraordinary heroism in action at Noyon, France, March 26, 1918; near the Marne River, France, during July, 1918; and in the St. Mihiel salient, France, Sept. 12, to 16, 1918. For displaying bravery far beyond that required by his position as Chief of Air Service, First Army, American Expeditionary Forces, setting a personal example to the United States aviation by piloting his airplane over the battle lines since the entry of the United States into the war. Some instances being a flight in a monoplane over the battle of Noyon on March 26, 1918, and the back areas, seeing and reporting upon the action of both air and ground troops, which led to a change in our aviation's tactics, a flight in a monoplane over the bridges which the Germans had laid across the Marne during July, 1918, which led to the first definite reports

of the location of these bridges and the subsequent attack upon the German troops by our air forces. Daily reconnaissances over the lines during the battle of St. Mihiel Salient, Sept. 12 to 16, securing valuable information of the enemy troops in the air and on the ground, which led to the excellent combined action by the allied air services and ground troops particularly in this battle." Distinguished Service Medal; Commander of French Legion of Honor, French (War Cross); British Order of St. Michael and St. George.

Books: "Our Air Force."

Member: Metropolitan Club (Wash.); Chevy Chase Club; Aero Club of America; Army and Navy (Wash.).

Present Occupation: Assistant to Chief of Air Service, U. S. Army.

Address: Air Service, Washington, D. C.; home, 1712 Rhode Island Ave.

Reuben Curtis Moffat

MOFFAT, REUBEN CURTIS, 1st Lieut., Air Service; born, Brooklyn, N. Y., April 24, 1897; son of Dr. John Little Moffat and Elizabeth (Rhodes) Moffat.

Educated: Adelphi Academy, Brooklyn, N. Y.; Ithaca High School; 1914-1917, Cornell University.

Aeronautical Activities: Cornell Ground School, Dec. 1917; elementary training, Kelly Field No. 2, Feb. 1918; Camp Dick, Post Field, Taliaferro Field; Observation Pilot, 8th Aero Squadron, Nov. 1918 to Feb. 1919; Mitchell Field, Hazelhurst Field; Assistant Dept. Air Officer; commercial flying in Georgia, Alabama, Massachusetts and Maine; Assistant Air Officer, First Corps Area, Oct. 1920 to date.

Flying Rating: Reserve Military Aviator, Feb. 1918; Airplane pilot, March 1921.

Member: Massachusetts Aero Club.

Present Occupation: 1st Lieut., Air Service.

Address: Corps Area Hdq., Army Base, 8 Boston, Mass.; home, 198 Union Ave., Framingham, Mass.

William Adger Moffett

MOFFETT, WILLIAM ADGER, Captain, U. S. Navy; born Charleston, S. C., Oct. 11, 1869; Son of George Hall Moffett and Elizabeth (Simonton)



William Mitchell

Moffett; married Jeannette Whitton, July 26, 1902.

Educated: public schools, Charleston, S. C., U. S. Naval Academy, Annapolis, Md.

Professional: Officer, U. S. Navy.

Aeronautical Activities: Instituted and supervised Aeronautical Mechanics' school at U. S. Naval Training Station, Great Lakes, Ill., Director, naval aviation, U. S. Navy.

War Honors: Medal of Honor, Distinguished Service medal.

Member: Army and Navy Club, (Wash.), Chevy Chase, University (N. Y.) New York Yacht Club, Onwentsia, (Lake Forest, Ill.), Exmoor County Club, Chicago Athletic Association.

Present Occupation: Director of Naval Aviation.

Address: Navy Department, Washington, D. C., Home, 1700 Q St., N. W.

James Alexander Mollison

MOLLISON, JAMES ALEXANDER, 1st Lieut., Air Service; born, Smith Center, Kans., July 9, 1897; son of James Douglas Mollison and Mary E. Mollison.

Educated: Public schools of San Diego, Calif.; San Diego Army and Navy Academy.

Aeronautical Activities: Started flying training, Jan. 1918; graduated from Pursuit and Aerial Gunnery School, Rockwell Field, 1918; Cleveland Forrest Patrol, 1919; Mexican Border Patrol, Sept. 1919 to March 1921; Project B, May 1921 to date.

Flying Rating: Airplane Pilot.

War Service: Signal Reserve Corps, Air Service, Nov. 1, 1917 to Nov. 11, 1918.

Present Occupation: 1st Lieut., Air Service.

Address: 2076 Third Street, San Diego, Calif.

Paul Nissen Montague

MONTAGUE, PAUL NISSEN, Real Estate; born, Winston-Salem, N. C., Nov. 16, 1890; son of H. Montague and Estella (Nissen) Montague; married, Juanita Davis, Aug. 25, 1919.

Educated: Salem Boys School; University of North Carolina.

Professional: 1912-1917, Automobile dealer; 1919 to date, Real Estate and Investments.

Aeronautical Activities: Fall of 1915, Thomas



William A. Moffett

Flying School, Ithaca, N. Y.; Oct. and Nov. 1916. Atlantic Coast Aeronautical Station, Newport News, Va.; enlisted S. E. R. C., April 20, 1917 at Memphis, Tenn.; Ashburn Field, Chicago, until June; June, July and Aug. at Chanute Field, flew R. M. A. tests; trained at Third A. I. C., A. E. F. Nov. and Dec. 1917 and Jan. 1918; French School of Aerial Fire, Cazaux, France, Feb. 1918; Ferry Pilot, March 3rd to April 15, 1918; First Air Depot Z of A, April 16 to May 14, flying various ships; Ninety-fifth Squadron, First Pursuit Group, Toul Front, May 15 to June 30; Chateau Thierry Front and Aisne-Marne Offensive, July 1 to July 31; captured, prisoner of war.

Flying Rating: Reserve Military Aviator as per W. D. Personnel Orders No. 70, dated March 24, 1920; rating to date from Sept. 22, 1917.

War Service: Sergt., Air Service, April 20, 1917 to Sept. 12, 1917; 1st Lieut., Air Service, Sept. 12, 1917 to Feb. 4, 1919.

Present Occupation: Real Estate and Investments.

Address: Merchants Bank Bldg.; home 131 So. Cherry St., Winston-Salem, N. C.

Archibald Moore Montgomery

MONTGOMERY, ARCHIBALD MOORE: born, New York City, Nov. 8, 1897; son of James M. Montgomery and Florence E. Montgomery.

Educated: Pawling, Lawrenceville, 1915; A. B. 1919, Princeton University.

Flying Rating: Ensign, Naval Aviator No. 1406; Aero Club of America Expert's Certificate No. 228; Hydroaeroplane Pilots Certificate No. 532.

War Service: American Field Service, France 1917; U. S. Naval Air Service, 1918.

Member: Aero Club of America; Princeton Club of New York.

Present Occupation: Exporter.

Address: P. O. Box 888, City Hall Branch; home, 801 West End Ave., New York, N. Y.

Howard L. Montgomery

MONTGOMERY, HOWARD L., Lawyer: born, Fort Edward, N. Y., Oct. 3, 1890; son of Lewis Montgomery and Elizabeth (Early) Montgomery.

Educated: Fort Edward High School; L. L. B. 1911, Yale University.

Professional: Lawyer, writer, and speaker.

Aeronautical Activities: Attended S. M. A. at Cornell University; Trained in France.

Flying Rating: Reserve Military Aviator.

War Service: U. S. Army Air Service, June 1917 to Feb. 1919.

Present Occupation: Lawyer.

Address: 122 Glen St., Glens Falls, N. Y.; home, 217 Broadway, Fort Edward, N. Y.

Robert D. Moor

MOOR, ROBERT D., 1st Lieut., Air Service; born, Toledo, Ohio, Dec. 23, 1894; son of W. B. S. Moor and Agnes (McCormick) Moor.

Educated: Public and high schools of Toledo, Ohio; May 1916, Winona College of Agriculture.

Professional: Management of mercantile business.

Aeronautical Activities: Began training May 1918 at Payne Field; graduate, Pursuit and Aerial Gunnery Courses, Rockwell Field, 1919; Border Patrol, Sanderson and Del Rio, Tex., Nov. 25, 1919 to May 16, 1921.

Flying Rating: Airplane Pilot.

Present Occupation: 1st Lieut., Air Service.

Address: 1441 W. Delaware Ave., Toledo, Ohio.

I. A. Morberg

MORBERG, I. A., Engineer; born, on board vessel entering U. S. A., May 19, 1892; son of H. J. Morberg and Elizabeth (Anderson) Morberg; married, July 8, 1914.

Educated: Public schools; technical school (Lewis Institute, Chicago, and Noerkoping Technical Institute, Sweden).

Professional: Design of Rotary Engine; test and assembly of LeRhone engines on government contract during 1918 at U. S. & S. Co., Swissvale, Pa.; assembly and test of Lycoming engines at Williamsport, Pa., 1919-1920.

Present Occupation: Western Electric Co.

Address: 4836 Dakin St., Chicago, Ill.

Richard Colton Morrill

MORRILL, RICHARD COLTON, Insurance Broker; born, Alpinen-Hudson, June 13, 1891; son of Frank T. Morrill and Annie F. Morrill; married, Eugenie S. Kunkeli, Nov. 15, 1919.

Educated: Hotchkiss, Lawrenceville; 1913, Yale Sheffield Scientific School.

Professional: A. F. Morrill, Inc., Insurance Brokers.

Aeronautical Activities: Training at Cornell Ground School, Gerstner Field, San Diego Field; Instructor, Dual, Aerial Gunnery, Wireless Telephone; completed Pursuit Course.

Flying Rating: Reserve Military Aviator.

War Service: Army, May to Aug. 1917, First Officers Training Camp, Madison Barracks; Air Service, Aug. 1917 to Jan. 19, 1919.

Present Occupation: Vice-Pres., A. F. Morrill, Inc., Insurance Brokers.

Address: 82 Beaver St.; home, 53 East 87th St., New York City.

Edward M. Morris

MORRIS, EDWARD M., 1st Lieut., Air Service; born, Marinette, Wis., Dec. 21, 1895.

Educated: Public schools, New York, N. Y.; Stuyvesant High School, New York, N. Y.; B. S. 1917, College of the City of New York.

Professional: Statistician, Metropolitan Life Insurance Co., New York, N. Y., Feb. 1917 to Aug. 1917; rancher, May 1919 to Sept. 1920.

Aeronautical Activities: Trained with R.F.C. in Toronto, Canada, Oct. and Nov. 1917, Fort Worth, Nov. 1917 to Feb. 1918; 139th Squadron, Feb. 1918 (overseas, Feb. 26, 1918) to April 1918; 12th A. S., April to July 1918; 2nd A. I. C., France, July and Aug. 1918; 104th A. S., Sept. 1918 to Jan. 1919; at March Field, Nov. 1920 to April 1921; Langley Field, April 1921 to date.

Flying Rating: Reserve Military Aviator, Jan. 28, 1918; Airplane Pilot, Feb. 25, 1921.

War Service: As above.

War Honors: Distinguished Service Cross.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Hampton, Va.; home, 25 Convent Ave., New York, N. Y.

Joseph Erwin Morris

MORRIS, JOSEPH ERWIN, Banking; born, Brooklyn, N. Y., Sept. 21, 1896; son of James Morris and Eleanor Morris.

Educated: Public and high schools; City College of New York; Brooklyn Polytechnic College.

Professional: Investment banking, 1919 to date.

Aeronautical Activities: Training at Eberts Field, 1918-1919; member Aviation Section, New York City Police Reserve.

Flying Rating: Reserve Military Aviator, Jan. 1919.

Member: New York Reserve, Aviation Section.

Present Occupation: Banking.

Address: 166 Montague St.; home, 348a Douglas St., Brooklyn, N. Y.

William Colb Morris

MORRIS, WILLIAM COLB, 1st Lieut., Air Service; born, Harrisburg, N. C., Aug. 4, 1891; son of Zeb. A. Morris and Sallie (Culp) Morris.

Educated: Concord High School; Wright Bros. Preparatory School; Davidson College; U. S. Military Academy.

Professional: Salesman for Nash Bros. of Minneapolis with stations at Winnipeg, Manitoba, Canada and Yockton, Saskatchewan, Canada.

Aeronautical Activities: U. S. School Military Aeronautics, Berkeley, Calif., 1917; flying training at Rockwell Field, Gerstner Field; Advanced Pursuit Training at Issoudun, France; 1st Aviation Ins. Center for Advanced Gunnery Course; discharged July 1919; re-entered service Sept. 1920; flying instructor at March Field; test pilot and assistant engineering officer, 95th Squadron; attached to 14th A.S. in connection with bombing off Virginia coast.

Flying Rating: Reserve Military Aviator, March 1918; Airplane Pilot, Oct. 1920.

Present Occupation: 1st Lieut., Air Service.

Address: Ellington Field, Tex.; home, 97 S. Main St., Concord, N. C.

Charles Lester Morse

MORSE, CHARLES LESTER, 1st Lieut., Air Service; born, Colebrook, N. H., June 2, 1893; son of Charles Morse and Lida Jane (Kellum) Morse.

Educated: Public schools of Lancaster, N. H.; B.S. in Civil Engineering 1915, Mass. Inst. of Tech.; Course in Aeronautical Engineering, 1918-1919, Mass. Inst. of Tech.

Professional: Junior Engineer, New York Public Service Commission, June 1915 to Aug. 1917.

Aeronautical Activities: Cornell Ground School, 1917; Primary Training, Mineola and Lake Charles, 1917-1918; commissioned 2nd Lieutenant, March 1918; training at Camp Dick, Taliaferro Field; Pilot Instructor in Aerial Gunnery at Hicks Field to Oct. 1918; course in Aeronautical Engineering Mass. Inst. of Tech., Oct. 1918 to Feb. 1919; transferred to McCook Field, Feb. 1919; Aeronautical Engineer in Airplane Section, Structure and Aerodynamics Branch and Pilot at present time.

Flying Rating: Reserve Military Aviator, March 1918; Airplane Pilot.

War Service: As above.

Present Occupation: 1st Lieut., Air Service.

Address: McCook Field, Dayton, Ohio; home, Middle St., Lancaster, N. H.

Frank L. Morse

MORSE, FRANK L., Manufacturer; born, Ithaca, N. Y., Sept. 14, 1864; son of Ben Morse and Sarah (Fitchette) Morse; married, Cora Perry, April 7, 1910.

Educated: Public schools, Ithaca, N. Y.
Professional: Manufacturer since 1880; executive.

Aeronautical Activities: President of Thomas-Morse Aircraft Corp., Manufacturers of airplanes and aeronautical engines.

Member: Engineers Club (N. Y.); Detroit Athletic Club; A. S. M. E.; Society of Automotive Engineers; Town and Gown, Ithaca, N. Y.; Country Club of Ithaca; University Club of Ithaca.

Present Occupation: President, Morse Chain Co.; President, Thomas-Morse Aircraft Corp.; President, Peters-Morse Mfg. Corps.

Address: Morse Chain Co., Ithaca, N. Y.; home, "Green Trees", Ithaca, N. Y.

Edison Esadore Mouton

MOUTON, EDISON ESADORE, Air Mail Pilot; born, Sacramento, Calif., Dec. 10, 1894; son of Edward E. Mouton and Gertrude Frances (Winters) Mouton; married, Claire Yerington, April 24, 1921.

Educated: Sacramento High School; Ft. Bron Aeronautical School, France.

Professional: Hop growing and ranching, Sacramento, Calif., 1915-1917.

Aeronautical Activities: Graduated Ft. Bron Technical School, Nov. 1917; attached test dept. Issoudun, France, as mechanic in charge of test line, Field 5, Dec. 1917 to May 1918; graduated, Issoudun Pursuit School and commissioned, Sept. 1918; test pilot, Issoudun, Sept. 1918 to April 1919.

Flying Rating: Reserve Military Aviator.

War Service: U. S. Army, May 1917 to May 1919; A. E. F. Aug. 1917 to May 1919.

Member: Allied Fliers Club of Oakland; Air Mail Pilots of America; Veterans of Foreign Wars; Native Sons of the Golden West.

Present Occupation: Air Mail Pilot.
Address: Air Mail Field; home, Reno, Nev.

Henry C. K. Muhlenberg

MUHLBERG, HENRY C. K., Major, Air Service; born, St. Louis, Mo., Nov. 6, 1886; son of Gen. J. A. Kress, (retired) and Lydia Homet, married, Helen M. Dorrington, July 1909.

Educated: Public schools; Omaha High School, Omaha, Nebr.; U. S. Military Academy, 1908; School of Musketry, Monterey, Calif., 1910; Watertown Arsenal, 1914.

Professional: Entered army as 2nd Lieut., 1908; promoted to 1st Lieut., Inf., 1913; Capt., Inf., 1917; Major, Signal Corps, 1917; Lt. Col., Air Service, 1918; Major, J. M. A., Feb. 1920; Major, Air Service, 1920.

Aeronautical Activities: Detailed to Aviation Section, Signal Corp., Dec. 1917; sent to San Diego, Calif. for flying instruction.

Flying Rating: Junior Military Aviator, March 16, 1918; Airplane Pilot, July 3, 1920.

War Service: In charge testing dept. Technical Section, Air Service, May to Sept. 1918, Wilbur Wright Field; in command Armorer's School, Air Service, Fairfield, Ohio, Sept. 1918 to Jan. 1919; in charge Material Section, Engineering Division, Air Service, McCook Field, Jan. to May 1920; in command Rich Field, Waco, Tex., May to Dec. 1920; in charge of Air Service, R. O. T. C. unit, University of Washington, Seattle, Wash., to date.

Present Occupation: Asst. Prof., Military Tactics, R. O. T. C., University of Washington; *Address:* University of Washington; home, Fort Lawton, Seattle, Wash.

James Patrick Murray

MURRAY, JAMES PATRICK, Air Mail Pilot; born, Mystic, Conn., Nov. 23, 1892; son of Patrick F. Murray and Margaret (Donovan) Murray. *Educated:* Norwich Academy; B.S. 1914, Trinity College.

Professional: Science, Mathematics and Athletic Instructor, Newman School, Tackensack, N. J.

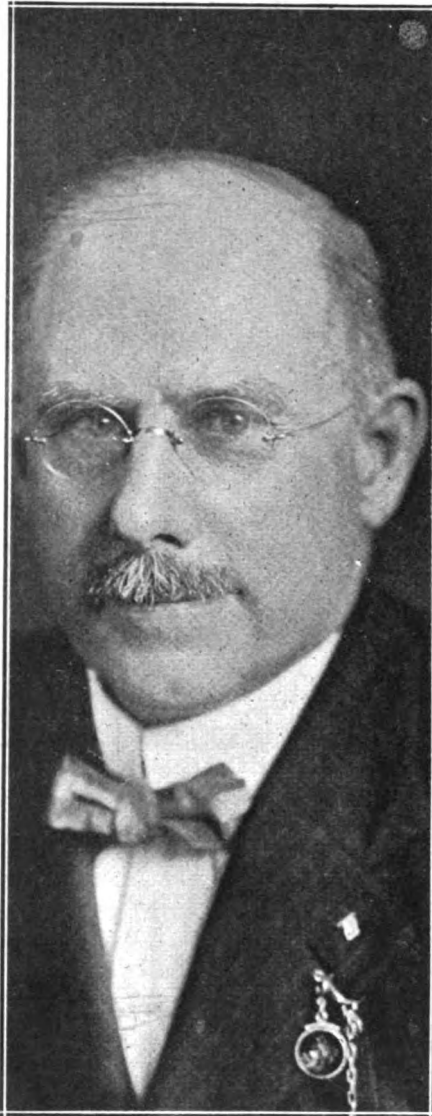
Aeronautical Activities: Enlisted in R.F.C., June 1917; trained at Toronto, Camp Borden, Canada, Salisbury Plains, England; flying instructor, R.F.C., England, March 1918 to March 1919.

War Service: As above; joined 11th Squadron R.A.F., April 1919; Army of Occupation, April 1919 to Sept. 1919, carrying mail from Folkstone, England to Cologne, Germany.

Present Occupation: Air Mail Pilot.
Address: 115 W. 19th Street, Cheyenne, Wyo.; home, 124 McKinley Ave., Norwich, Conn.

Donald P. Muse

MUSE, DONALD P., Captain, Air Service; born, Jonesboro, Ark., July 29, 1891; son of Moses P. Muse and Eliza A. Muse; married,

*Frank L. Morse*

Margaret Rand-lph. Feb. 4, 1917.

Educated: Public and high schools of Junction City; A.B. and B.S. 1912, Ouachita College, Arkadelphia, Ark.; Accounting, Eastman College, Poughkeepsie, N. Y., 1913; A.S. Engineering School, McCook Field, 1921.

Professional: Accountant and stock holder, Muse Mercantile Co., Junction City, Ark., 1913 to 1916.

Aeronautical Activities: Began flying instruction, Aug. 1917; Flying Instructor, U. S. Army Air Service, Sept. 1917 to Nov. 1918; flying incident to military duties, Nov. 1918 to date.

Flying Rating: Reserve Military Aviator, Sept. 1917; Airplane Pilot, July 1920.

Present Occupation: Captain, Air Service, U. S. Army.

Address: McCook Field, Dayton, Ohio; home, Junction City, Ark.

George M. Myers

MYERS, GEORGE M., Retired Capitalist; born, New York City, Nov. 25, 1855; son of Philip Myers and Margaret (Mukchi) Myers; married, Laura V. Boyd, Sept. 1, 1880.

Educated: High School.

Professional: Telegraph operator, Lake Shore & Michigan Southern Railroad, 1870; Western Union Telegraph Co., Kansas City, 1875; organized Pacific Mutual Telegraph Co. and Commercial Telegraph Co.

Aeronautical Activities: Governor, Aero Club of America for several years; organized Kansas City Aero Club, 1906, president; was leading spirit in International Balloon Race, Kansas City, 1911.

Present Occupation: Vice Pres., Automatic Sprinkler Co. of America.

Address: 506 New England Bldg., Kansas City, Mo.; home, 633 East Armour Blvd., Kansas City, Mo.

Oscar Blair Myers

MYERS, OSCAR BLAIR, Engineer; born, Mount Vernon, N. Y., Oct. 3, 1894; son of S. Oscar Myers, M.D. and Frances (Merriam) Myers.

Educated: Grammar and high schools; Electrical Engineer, 1916, Columbia University, School of Engineering.

Professional: Telephone Engineer, 1916-1917; Gas Engineer, 1920-1921.

Aeronautical Activities: In addition to war service, two months in 1920 with N. A. P. S. Company, Providence, R. I., as pilot carrying passengers, taking aerial photographs and motion pictures.

Flying Rating: Breveted by Aero Club d'Italia, Jan. 1918.

War Service: Ground School, Cornell Aug. 11, 1917; preliminary flying training, Foggia, Italy; advanced training, Tours, Clermont-Ferrand, Issoudun and Cazaux, St. Mihiel and Argonne offensives with 1st Pursuit Group, 147 Squadron; destruction of two enemy planes confirmed.

Honors: Distinguished Service Cross; citation, Sept. 28, 1918; Bronze War Medal; Aero Club of America.

Member: Aero Club of America.

Present Occupation: Gas Engineer.

Address: Westchester Lighting Co., 1st Ave. and 1st Street; home, 109 South 3rd Ave., Mount Vernon, N. Y.

Earl Larue Naiden

NAIDEN, EARL LARUE, Major, Air Service; born, Woodward, Iowa, Feb. 2, 1894; son of Henry Richard Naiden and Cara (Larue) Naiden; married, Mary Frances Semans, Dec. 20, 1919.

Educated: Woodward High School; Iowa State College and U. S. Military Academy, West Point.

Professional: Entered Cavalry, 2d Lieut. 1915; joined Aviation June 1916; Overseas one year and eleven months; American Air Service Representative to Italy 1917; Served ten months on General staff G. H. Q., in G3 Section; instructor in Air Service at General Service Schools since 1919.

Aeronautical Activities: Made Junior Military Aviator, March 1917 at San Diego, Calif.; joined first Aero Squadron on border, April 1917; sailed with Squadron for France, Aug. 1917; trained in France, Italy, and later in the American schools in France; first American pilot to qualify as a Caproni pilot; trained as night bombing and pursuit pilot; served with French in a night bombing squadron at front.

Flying Rating: Junior Military Aviator; Civilian Pilot license.

War Service: Army Air Service 23 months; certificate of Merit by General Pershing; and Officer of the Black Star, from France, 1918.

Books: Air Service text book used at General service schools.

Member: Aero Club of Iowa.

Present Occupation: Instructor General Service schools in Air Service.

Address: 273-A, Fort Leavenworth, Kansas; home, Woodward, Iowa.

Frank LeRoy Nape

NAPE, FRANK LEROY, Physician; born, Carrollton, Ohio, Jan. 8, 1884; son of John H. Nape and Isabelle Nape; married, Ada Jacobs, June 7, 1919.

Educated: Carrollton High School, 1899; Cleveland College for Physicians and Surgeons, 1905; Cleveland Homeopathic Medical College, 1907.

Professional: Began practice surgery and medicine, 1907 and continued to date.

Aeronautical Activities: Course in aeronautics in 1919 and built a plane which he uses in making calls on patients in nearby cities; aerial photography and advertising.

Flying Rating: International Pilot's License No. 4775.

Member: Canton Aviation Club.

Present Occupation: Physician.

Address: 1633 Navarre Road, S. W., Canton, Ohio.

Marshall Stanley Neal

NEAL, MARSHALL STANLEY, Automobile business; born, Kansas City, Mo., April 20, 1890; son of F. P. Neal and Ida D. Neal.

Educated: Yale University 1911 S. Ph. B.

Professional: President, Kansas City Terra Cotta Co., 1913-1915; Vice President, Employer's Indemnity Corp., 1915-1917; President, Neal Motors Co., 1919-1921.

Aeronautical Activities: Ground school, Nov. 1917 to Feb. 1918; commissioned 2nd Lieut. at Carruthers Field, Ft. Worth, Tex., April 1918; instructor 3 months; officer in charge of flying, June to Oct.; discharged Dec. 12, 1918.

Flying Rating: Reserve Military Aviator, April 8, 1918.

War Service: Army, Nov. 1917 to Dec. 1918.

Member: Kansas City Club; Kansas City Country Club.

Present Occupation: Motor car business.
Address: 1318 Commerce Bldg.; home, 400 E. Armour Blvd., Kansas City, Mo.

Carlyle LaMar Nelson

NELSON, CARLYLE LAMAR, Secretary to the Governor, State of Utah; born, Manti City, Utah, June 9, 1893; son of Andrew C. Nelson and Amanda (Jenson) Nelson.

Educated: Salt Lake City Public Schools; University of Utah; Columbia University.

Professional: Newspaper writer, 1916-1917; two years in military service; Secretary, Republican State Committee of Utah, Nov. 1919 to Nov. 1920; Secretary to Governor of Utah, Jan. 1921 to date.

Aeronautical Activities: Short service in commercial flying in United States immediately following return to U. S.

Flying Rating: Reserve Military Aviator.

War Service: Ground School, University of California; overseas service, March 1918 to May 1919; attached to Escadrille 131 Groupe de Bombardement No. 4, French Army, July 1918 to Nov. 1918; pilot in day bombardment service at the front (five major campaigns); attached to 100th Squadron, U. S. 2nd Army, Nov. 1918 to April 1919.

War Honors: Croix de Guerre, two citations; Ordre d'Escadre; Ordre d'Armee.

Citation: "Attached to Bombardment Group No. 4, he has given under all circumstances proof of a devotion undying and remarkable bravery. The 12th of September, 1918, he accomplished two successive bombardments, machine-gunning from a very low altitude in terrific weather. He surprised and set on fire an enemy 'drachen'. On the 14th of September in the course of a bombardment of a great railroad station a long distance from the front, he engaged in a terrible combat against enemy pursuit planes three times superior in number. He brought one of his adversaries down in flames."

Member: Aero Club of America; President, Aero Club of Utah.

Present Occupation: Secretary to the Governor, State of Utah.

Address: State Capitol; home, 840 Park Street, Salt Lake City, Utah.

Erik Henning Nelson

NELSON, ERIK HENNING, 1st Lieut., Air Service; born, Stockholm, Sweden, June 18, 1888; son of Erik E. Nelson and Christina (Ahler) Nelson.

Educated: High school and technical school of Stockholm, Sweden.

Professional: Automobile business, 1909 to 1915.

Aeronautical Activities: 1916-1917 Experimental Dept., Curtiss Co.; Transoceanic Co., July to Oct. 1917.

War Service: Army Air Service, Oct. 1917 to date.

Member: Aero Club of America; Expert License, Aero Club of America.

Present Occupation: 1st Lieut., Air Service.

Address: Aero Club of America, 11 East 38th St., New York City.

Douglas Blakeshaw Netherwood

NETHERWOOD, DOUGLAS BLAKESHAU, Major, Air Service; born, Birmingham, England, Feb. 4, 1885; son of Tom Netherwood and Ann (Wood) Netherwood; married, Harriet V. C. Bowne, April 30, 1919.

Educated: Public schools, McCulloch County, Texas; Agricultural and Mechanical College of Texas, B. S. M. E. 1908.

Professional: Served as private, corporal and sergeant, 20th Co., C. A. C., from July 30, 1908 to Aug. 6, 1911; appointed 2nd Lieut., C. A. C., Aug. 7, 1911; promoted 1st Lieut., C. A. C., July 1, 1916 and Captain, C. A. C., May 15, 1917; 1st Lieut., S. C., Aug. 20, 1914; Captain, S. C., July 1, 1916; Major, May 15, 1917; temporary Lt. Col., Air Service, Aug. 20, 1918 to Feb. 20, 1920; permanent commission as Major, Air Service, July 1, 1920.

Aeronautical Activities: Detailed for aviation duty in the Signal Corps, Dec. 10, 1913 and learned to fly at San Diego, Calif. in Wright Type "B" airplane No. 3; left San Diego for Philippine Islands, Jan. 2, 1916; on aviation duty Corregidor, Manila, P. I. until return to U. S., July 1917; duty O. C. S. O., Washington, D. C., Aug. to Nov. 1917; duty as Commanding Officer, Love Field, Nov. 21, 1917 to April 27, 1918; organized and established Aviation Repair Depot, Dallas, Tex. early in 1918 and commanded that station continuously until it was closed on March 28, 1921.

Flying Rating: Pilot license No. 312; expert aviator's certificate No. 41, Aero Club of America; Junior Military Aviator, Aug. 20, 1914; Military Aviator, Aug. 20, 1917; Airplane Pilot, 1920.

Member: Army and Navy Club, (Wash.).

Present Occupation: Executive Officer, San Antonio, A. I. Depot, San Antonio, Tex.

Address: S. A. A. I. D., Kelly Field, San Antonio, Tex.

George Mason Nicholson

NICHOLSON, GEORGE MASON, Accountant; born, Zuni, Va., May 31, 1895; son of John Young Nicholson and Helen Minerva Nicholson; married, Elizabeth Caroline Duckwall, Jan. 8, 1920.

Educated: William and Mary College, Williamsburg, Va.

Professional: Railroad employee, 1913-1917; accountant since the war.

Aeronautical Activities: March-April 1918, Ground School, University of Texas; flying instructor at Dayton, Ohio; Instructor and Student at West Point, Miss., Mineola, N. Y. and San Diego, Calif., until Jan. 1919.

War Service: May 1917 to Jan. 1919.

Member: Aero Club of America; Military Order of the World War.

Present Occupation: Accountant.

Address: 202 Law Bldg.; home, 4714 Colonial Ave., Norfolk, Va.

John Fred Nixon

NIXON, JOHN FRED, Airplane Pilot; born, Paterson, N. J., July 15, 1898; son of John James Nixon and Katherine (Lawler) Nixon.

Educated: Grammar school; Paterson High School.

Professional: Superintendent, By-Product Coke Plant, Paterson, N. J., year of 1919; airplane passenger carrying since April 1920.

Aeronautical Activities: Since 1920 has been operating own plane as passenger carrier, also some moving picture work for Pathe Exchange and giving flying instruction.

War Service: Graduate, Austin Ground School, U. S. A., May 1918; commissioned 2nd Lieut., U. S. Air Service, Sept. 1918; instructor, Carruthers Field, Ft. Worth, Tex.; attended Brooks Field instructors school, Jan. 1919; transferred to March Field, Calif. as instructor, April 1920.

Flying Rating: Reserve Military Aviator.

Member: Aero Club of America.

Present Occupation: Passenger airplane carrying and motion picture work.

Address: 139 Graham Ave., Paterson, N. J.

Joseph Pugh Norfleet

NORFLEET, JOSEPH PUGH, Lt. Comdr., U. S. N.; born, Richmond, Va., Aug. 27, 1888; son of Richard U. Norfleet and Laura Slade (Pugh) Norfleet.

Educated: Private preparatory schools; Trinity Military School; Washington and Lee University; 1910, Naval Academy.

Professional: Naval Officer.

Aeronautical Activities: Heavier-than-air training, Pensacola, Fla., 1915-1916; Lighter-than-air, 1917, England and U. S.; Air Station, France, 1918, Paris, 1918-1920; Navy Department, Wash., Sept. 1920-1921, then to Air Station, Lakehurst, N. J.

Flying Rating: Naval Aviator.

War Service: Navy. Ireland in April 1917, then England, U. S. and France.

Member: Army and Navy Club; Aero Club of America; New York Yacht Club; Chevy Chase Club; Officers of Foreign Wars.

Present Occupation: Lt. Comdr., U. S. N., Commanding Naval Air Station, Lakehurst, N. J.

Address: Naval Air Station, Lakehurst, N. J.

Howard D. Norris

NORRIS, HOWARD D., 1st Lieut., Air Service; born, Washington, D. C., July 28, 1896; son of Howard D. Norris and Gertrude H. Norris.

Educated: Maplewood Institute; St. John's College; Emerson Institute; George Washington University.

Professional: Five years with Patent Law Firm.

Aeronautical Activities: U. S. S. M. A., Cornell University, Oct. 1917; flying training at Selfridge Field; Instructor, Aerial Gunnery, Selfridge Field, May 1918 to Sept. 1919.

Flying Rating: Airplane Pilot.

Member: Aero Club of America.

Present Occupation: 1st Lieut., Air Service.

Address: Mitchell Field, L. I., New York.

Frederick Harwood Norton

NORTON, FREDERICK HARWOOD, Physicist; born, Manchester, Mass., Oct. 23; son of Prof. Charles Ladd Norton and Francis Torrey Norton.

Educated: Public schools of Nashua, N. H.; B. S. M. I. T., 1918.

Aeronautical Activities: Aeronautical research at M. I. T., 1918-1919; with N. A. C. A. at Langley Field, 1919 to date.

Member: Amer. Physical Soc.; S. A. E.

Present Occupation: Chief Physicist, N. A. C. A.

Address: National Advisory Committee for Aeronautics, Langley Field, Va.

Clifford Cameron Nutt

NUTT, CLIFFORD CAMERON, 1st Lieut., Air Service; born, Kansas City, Mo., July 25, 1896; son of Mr. and Mrs. Alva V. Nutt.

Educated: Public school and Manual Training High School of Denver, Colo.

Aeronautical Activities: Ground School, 1917; Instructor in flying, 1918; Officer in Charge flying, Ellington Field, 1919; ordered to Washington, Officer Chief Air Service, Nov. 1920; Flight Commander, 14th Bombing Squadron, Langley Field to date.

Flying Rating: Reserve Military Aviator, Jan. 1918; Airplane Pilot, April 1920.

Member: Army and Navy Club, Washington.

Present Occupation: 1st Lieut., Air Service.

Address: Kelly Field, Tex.; home, 105 North Indiana Ave., Kansas City, Mo.

John Chilton W. O'Donnell

O'DONNELL, JOHN CHILTON W., Major, Air Service; born, Baltimore, Md., Nov. 9, 1887; son of Eugene W. O'Donnell and Ann (Chilton) O'Donnell; married, Delphine Rains, July 16, 1919.

Educated: B. S., Loyola College, Baltimore, Md.; Fordham University.

Professional: Commissioned 2nd Lieut. of Cavalry, Nov. 1912 and assigned to 11th U. S. Cavalry; detailed in Aviation Section, Signal Corps, 1915.

Aeronautical Activities: Served with American Punitive Expedition in Mexico, 1st Aero Squadron, Aug., 1916 to Feb., 1917.

Flying Rating: Junior Military Aviator, 1916; Military Aviator, 1919.

War Service: Officer in Charge Flying, Kelly Field and Selfridge Field, 1917, Ellington Field, 1918; part of this time was Commanding Officer; Corps Air Service Commander, 3rd Corps, 3rd Army, Jan. to April 1919.

Member: Baltimore Club; Sons of Revolution.

Present Occupation: Major, Air Service, U. S. Army.

Address: c/o Adjutant General of the Army, Washington, D. C.

William Doane O'Gorman

O'GORMAN, WILLIAM DOANE, Manufacturing; born, Newark, N. J., Nov. 14, 1888; son of Wm. O'Gorman and Elizabeth H. (Kelly) O'Gorman; married, Pauline Morison, Feb. 2, 1916.

Educated: Public schools of Newark, N. J. and St. Francis Xavier, New York City; M. E. 1911, Stevens Tech.; Harvard Grad. School, 1912.

Professional: 1912-1917, Carpenter Steel Co., Reading, Pa.

Aeronautical Activities: Lieutenant, Captain, and Major of Army Air Service, 1917-1919.

War Service: As above.

Member: Aero Club of America; Harvard Club.

Present Occupation: Power Driven Machine Gun Co.

Address: 61 Lloyd Road, Montclair, N. J.

Grover O'Neill

O'NEILL, GROVER, Investment Banking; born, St. Louis, Mo., Dec. 25, 1890; son of John G. O'Neill and Josephine Robertson; married, Catharine Gray Porter, Sept. 6, 1917.

Educated: 1916, Harvard University.

Professional: Banking business.

Aeronautical Activities: Aide to General W. L. Kenly, Director of Military Aeronautics; holds commission as Major, A. S. S. R. C.

Present Occupation: Investment Banking.

Address: 30 Pine St.; home, 993 Park Ave., New York City.

Ralph A. O'Neill

O'NEILL, RALPH A., Chief, Mexican Air Force; born, Durango, Mex., Dec. 7, 1891; son of Ralph Lawrence O'Neill and Dolores (Avila) O'Neill; married, Priscilla Eileen Wilson, Jan. 31, 1919.

Educated: Primary private school; El Paso high school; Lehigh University, non-grad. met. 1919, special student.

Professional: Eng. Dept. Int. Smelting & Ref. Co., Utah, 1915; junior partner, Kempton & O'Neill Customs Assessors, 1915-1919; Tech. Rep., Hercules Powder Co., 1919-1920; Chief, Mexican Air Force, 1920 to date.

Aeronautical Activities: Enlisted, Essington, Pa., Aug. 1917; U. S. S. of M. A., Sept. 1917; R. E. C. Flying, Nov. 1917; overseas, March 1918; commissioned 2nd Lieut., Feb. 7, 1918; Issoudun, April 1918; Toul Sector, May 1918; Chateau-Thierry Sector, June 1918; Champaign, Aire, etc. to Sept. 1918; St. Mihiel, Sept. 1918; Argonne, Oct. to Dec. 12, 1918; eight major engagements; commissioned 1st Lieut., Oct. 18, 1918; Flight Commander, June-Sept.; Squadron Commander.

Nov.—Dec.: 99 official patrols over lines as Squadron Leader; 89 official combats; 6 Huns, Confirmation by French 1st Army.

War Honors: Four citations; Distinguished Service Cross, July 2, 1918; D. S. C. Oak Leaf, July 5, 1918; D. S. C. Oak Leaf, July 24, 1918; Gen. Petain awarded Nov. 29th Croix de Guerre with Palm; winner of Tilton prize for first five American Aces, July 1918, officially credited with five aerial victories.

Member: Local Clubs: social, tennis, and golf.
Present Occupation: Chief, Mexican Air Force.
Address: Anglo-South American Bank, Mexico City; home, 218 Sonoma St., Nogales, Ariz.

Earl Pine Osborn

OSBORN, EARL PINE, Engineer; born, Hoosick Falls, N. Y., Jan. 24, 1899; son of Elihu H. Osborn and Sadie A. (Pine) Osborn.

Educated: Hoosick Falls High School; M. E. 1921, Rensselaer Polytechnic Institute.

Professional: New York State Highway Commission, June 1921 to date.

Aeronautical Activities: Enlisted Jan. 1918; graduated Cornell Ground School, Sept. 1918; graduated, Aerial Observers Course, Coast Artillery School, Ft. Monroe, Va., Dec. 1918; commissioned 2nd Lieut., A. S. S. O. R. C., Dec. 1918; graduated Aerial Observers School, Post Field, Feb. 1919; pilot training at Park Field and Carlstrom Field.

Flying Rating: Reserve Military Aviator, May 1919; Airplane Observer, May 1921.

Present Occupation: Engineer.
Address: Chamber of Commerce Bldg., Utica, N. Y.; home, Buskirk, N. Y.

Frank George Osgood

OSGOOD, FRANK GEORGE, Aeronautical Designer; born, Laconia, N. H., Oct. 8, 1890; son of William Osgood and Florence (Goodspeed) Osgood; married, E. Joyce Pickett, Jan. 15, 1920.

Educated: Public schools of Medford, Mass.; High School of Laconia, N. H.; three years, Lehigh University; Mass. Inst. of Tech.

Professional: Apprentice Machinist, 1906-1908; Apprentice Draftsman (Scott & Williams, Inc.) 1908-1910; Draftsman (Scott & Williams, Inc. and Laconia Car Co. Works), 1911-1912; Draftsman (Bethlehem Steel Corp.), 1912-1913.

Aeronautical Activities: Naval Aviation Inspectors School, M. I. T., Cambridge, Mass., Nov. 1917; Navy Inspectors School, Curtiss Co., Buffalo, N. Y., Jan. to April 1918; Inspector of Naval Aircraft in charge Production and Inspection, Burgess Co., Marblehead, Mass., April 1918 to Jan. 1919; under Sup't. Constructor of Aircraft, 1st Naval District; Bureau of Construction and Repair, Navy Department, Aviation-Lighter-than-Air Craft production and Parachute development, Jan. 1919 to Jan. 1920; Naval Aircraft Factory, 1920 to Aug. 1921; U. S. Army Air Service, Engineering Division, Balloon and Airship Branch, McCook Field; Aeronautical Designer to date.

War Service: Seaman, Nov. 14, 1917; Ensign, March 29, 1918; Lieut. (j.g.) Nov. 4, 1918.

Member: Technology Club; Pres., Airship Engineering Society of Dayton.

Present Occupation: Aeronautical Designer.
Address: Engineering Division, McCook Field; home, 709 N. Main St., Dayton, Ohio.

Brauner Jens Ostergaard

OSTERGAARD, BRAUNER JENS, Airplane Manufacturer; born, Aarhus, Denmark, Oct. 22, 1887; son of Christ J. Ostergaard and Ellen (Rasmussen) Ostergaard; married, Velva Myrtle Sherman, Feb. 21, 1915.

Educated: Grammar and High School.

Aeronautical Activities: Aeronautical construction from 1910 to date.

Present Occupation: The Ostergaard Aircraft Works.

Address: 4269 N. Naragansett Ave.; home, 4271 Naragansett Ave., Chicago, Ill.

Earle Ovington

OVINGTON, EARLE, Aviator; born, Chicago, Ill., Dec. 20, 1879; son of Edward Ovington and Mary Ovington; married, Adelaide Alexander, April 19, 1911.

Educated: Irving School, Tarrytown-on-Hudson; Mass. Inst. of Tech., Boston.

Professional: President, Ovington Mfg. Co., 1906-1908; President, Ovington Motor Co., 1908-1910.

Aeronautical Activities: Exhibition flying, Dec. 20, 1910 to Nov. 30, 1911; President, Curtiss Flying Station, Atlantic City, N. J. during the war; first aviator to fly over Boston; first aviator to fly over States of Connecticut, New Hampshire and Rhode Island; winner John R. McLean Cross-country trophy (\$2,500 cup); appointed by Postmaster General, Hitchcock, the first U. S. Aerial Mail Carrier, 1911.

Flying Rating: French "brevet" No. 440.

Member: Aero Club of America; Press Club; American Inst. of Electrical Engineers.

Present Occupation: Builder of patented "One Room" bungalows.

Address: Santa Barbara, Calif.

Stephen Paine

PAINE, STEPHEN, Banker; born, Roxbury, Mass., July 30, 1897; son of Wm. A. Paine and Ruth F. (Ward) Paine; married, Priscilla Davies, Sept. 30, 1920.

Educated: Country Day School, Newton, Mass.; 1920, Harvard University.

Professional: Stock and Bond business since March 1919.

Aeronautical Activities: Enlisted in U. S. Naval Air Service, April 1918; commissioned Oct. 1918; served as flying instructor until Feb. 1919.

Flying Rating: Hydroplane Certificate, Aero Club of America, No. 562, March 1919.

Member: Aero Club of Massachusetts; Harvard Clubs of Boston and New York.

Present Occupation: Stocks and Bonds, Paine, Webber & Co.

Address: 82, Devonshire St., Boston, Mass.; home, South Bluff, Mass.

George Merrill Palmer

PALMER, GEORGE MERRILL, 1st Lieut., Air Service; born, Rodney, Ohio, June 24, 1892; son of Thomas Morton Palmer and Alice A. Palmer; married, Susan E. Gaines, May 18, 1918.

Educated: Bidwell Porter High School.

Professional: Five years as experimental mechanic with Hall of Invention, Minneapolis, Minn.

Aeronautical Activities: Student at Mineola, L. I., 1917; Instructor and Stage Commander, Kelly Field, 1917-1918; pilot in 74th Aero Squadron, 1919; on Cross Country with Handley Page plane from Jan. to July 1919; Assistant Chief Engineer, Ellington Field, 1919; Adjutant and Pilot, 1st Day Bombardment Group, Nov. 1919 to Jan. 1920; Engineer Officer of 14th Squadron, Langley Field, 1921; Operations Officer, 14th Squadron, June 15 to date.

Flying Rating: Airplane Pilot.

War Service: 1st Infantry Minnesota N. G., March 1917 to May 1917; Aviation Section, Signal Corps and Air Service, U. S. Army from May 1917 to present date.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Raymond P. Palmer

PALMER, RAYMOND P., Publisher; born, East Bridgewater, Mass., Dec. 27, 1895; son of Frank Herbert Palmer and Jessie (Davies) Palmer; married, Margaret Campbell, Oct. 4, 1919.

Educated: Braintree Public Schools; Phillips Andover, and Thayer Academy; Burdett College.

Professional: Treasurer and manager, The Palmer Co.

Aeronautical Activities: U. S. Navy April 1917 to March 1918; Army Air Service, April 1918 to Jan. 1919.

Flying Rating: Airplane Observer.

Member: Aero Club of Massachusetts.

Present Occupation: Treasurer, The Palmer Co.

Address: 120 Boylston St., Boston, Mass.; home, 14 High St., Rockport, Mass.

Richard Raymond Palmer

PALMER, RICHARD RAYMOND, Banking and Foreign Exchange; born, Akron, Ohio, Dec. 8, 1889; son of Frank Leslie Palmer and Clara Etta (Heighlie) Palmer.

Educated: Public schools of Akron, Ohio; Lammell's College; Ohio State University; Mass. Inst. of Tech.

Professional: Assistant Manager, Foreign Department of the Guardian Savings and Trust Co., Cleveland, Ohio.

Aeronautical Activities: Organized Aviation Section in the Ohio Naval Militia at Cleveland, Ohio, 1915-1916; Course in aeronautics at Ohio State University, 1917; Instructor at U. S. Naval Air Station, Pensacola, Fla., 1918.

Flying Rating: Department of the Navy Naval Aviator Certificate No. 1862, Dec. 1918; Aero Club of America Hydreroplane Pilot's Certificate No. 623, April 1919.

War Service: Landsman Aero Mechanics, Ohio Naval Militia, 1915-1916; Chief Quartermaster, U. S. Naval Reserve Flying Corps May 1918 to Dec. 1918; Flight Instructor, Pensacola, Fla.; Flight Division Commander at U. S. Naval Air Station, Coco Solo, C. Z.; on submarine patrol, convoy, coast patrol and air guard of Panama Canal and fortification on Canal Zone; commissioned Ensign in U. S. N. R. Flying Corps, Oct. 1919.

Member: Marion Club, Indianapolis, Ind.; Aero Club of America.

Present Occupation: Banking and Foreign Exchange.

Address: 623 Euclid Ave., c/o The Guardian Savings and Trust Co., Cleveland, Ohio.

Victor Clark Parker

PARKER, VICTOR CLARK, Consulting Engineer; born, Mandan, N. D., Sept. 16, 1887; son of Morris Leslie Parker and Frances (Snyder) Parker; married, Matilda Thompson, June 24, 1914.

Educated: Public and high schools; Bachelor of Science in Mechanical Engineering, 1909, North Dakota Agricultural College.

Professional: 1909-1910, Technical Editor, "Modern Power" magazine; 1911-1912, Experimental Engineer, General Motors Co., Detroit; 1913-1915, Assistant Engineer, Buick Motor Division, G. M. Co., Flint; 1915-1917, Chief Technical Division, B. M. Co.

Aeronautical Activities: 1917, Chief Engineer, Gnome Motor production, Gen. Motors Corp.; 1917, Lab. Eng. Research, Naval Aviation Lab., Washington; 1917-1918, Major, 3rd M. M. Regiment, U. S. Air Service; Chief Inspector, Air Prod. Centre No. 2, Romorantin, France; Com. Officer, Production and Maintenance Division, night bombing machines, Milan, Italy.

War Service: Major, Sig. R. C., A. S., Dec. 1917-March 1919.

Member: Society of Automotive Engineers.

Present Occupation: Consulting Engineer.

Address: 717 Kingsley Ave., Waterloo, Iowa.

Victor Parks, Jr.

PARKS, VICTOR, JR., Captain, Air Service; born, Norfolk, Va., Dec. 7, 1895; son of Victor Parks, Sr. and Ena Lee Parks.

Educated: Moury High School, Norfolk, Va.; B. S. 1915, Virginia Military Institute.

Aeronautical Activities: Flying (pilot) A. E. F. French Escadrille, 123 Brequet, C. O., American 166th Aero Squadron, 1st Army.

Flying Rating: French Pilot, 1917; Reserve Military Aviator, 1917; Airplane Pilot, 1921.

War Service: As above.

War Honors: Croix de Guerre, Nov. 11, 1918; Army Citation, A. E. F., Nov. 1918.

Present Occupation: Student, Field Officers School.

Address: Field Officers School, Langley Field, Hampton, Va.

Henry Pascale

PASCALE, HENRY, Captain, Air Service; born, Omaha, Nebr., March 7, 1894; son of Vito Pascale and Ida Pascale.

Educated: Public and high schools of Omaha, Nebr.; A. B. 1916, University of Nebraska.

Professional: Student until May 1917 when ordered to First Training Camp, Fort Snelling, Minn.

Aeronautical Activities: Training at various fields; Aerial Photography along the Southern Border.

Flying Rating: Airplane Pilot, July 1918.

War Service: Army, May 1917 to date.

Present Occupation: Captain, Air Service.

Address: McCook Field, Dayton, Ohio; home, 4021 Cuming St., Omaha, Nebr.

Mason Mathews Patrick

PATRICK, MASON MATHEWS, Chief of Air Service; born, Lewisburg, W. Va., Dec. 13, 1863; son of Alfred Spicer Patrick, M. D. and Virginia (Mathews) Patrick; married, Grace W. Cooley, Nov. 11, 1902.

Educated: Various public and private schools; 1886, U. S. Military Academy.

Professional: U. S. Army Engineer Corps, Commandant, Engineers' School, Washington Barracks; Chief Engineer of the Army of Cuban Pacification, 1906-1908; 1921, Commanding Officer, Engineers' School, Camp Humphreys, Va.

Aeronautical Activities: May 1918-July 1919, Chief of Air Service, A. E. F.; A. E. F. Air Service, comprised 78,000 men; Oct. 5, 1921, Chief of Air Service, Washington, D. C.

War Service: U. S. Army.

War Honors: Awarded D. S. M.; Comdr., Legion of Honor; Comdr., Order St. Maurice and Lazarus; Knight Comdr., Order of the British Empire; Comdr., Crown of Belgium.

Member: Army and Navy Club (Wash.).

Present Occupation: Chief of Air Service.

Address: Room 2052, Munitions Bldg.; home, 2015 Kalorama Road, N. W., Washington, D. C.

George B. Patterson

PATTERSON, GEORGE B., 1st Lieut., Air Service; born, Brookline, Mass., April 19, 1895; son of James C. Patterson and Mary G. Patterson.

Educated: Asheville School, Asheville, N. C.; Mechanical Engineering, University of Pennsylvania.

Aeronautical Activities: Flying training at Essington, Pa., May 1917; Performance Test Pilot with Technical Section, 1918; Test Pilot, Engineering Division, 1919, 1920; Chief, Technical Data Section, Engineering Division, 1921.

Flying Rating: Reserve Military Aviator, Aug. 30, 1917; Airplane Pilot, Oct. 1920.

War Service: Sgt., S.E.R.C., May 13, 1917; 1st Lieut., S.O.R.C., Oct. 1, 1917; Capt., A.S., Oct., 11, 1918; 1st Lieut., Reg. Army, July 1, 1920.

Member: Aero Club of America; Dayton City Club; Dayton Country Club.

Present Occupation: Chief, Technical Data Section, Engineering Division.

Address: McCook Field, Dayton, Ohio; home, 410 Delaney St., Orlando, Fla.

John Thompson Patterson

PATTERSON, JOHN THOMPSON, Commercial Aviation; born, Castle Wellan, Ireland, Aug. 20, 1887; son of John Patterson and Sarah (Adair) Patterson.

Educated: Public schools of Detroit, Mich.; University of Michigan; Leland Stanford University.

Professional: 1909-1910, Assistant Secretary, Chamber of Commerce, Sacramento, Calif.; 1911-1912, Secretary and Business Manager, Maxi-motor Co.; 1912-1918, General Manager, Patterson Aviators and Patterson Aeroplane Co.; 1919, Director, General Manager, Universal Aviation Co.; 1920-1921, General Manager, Solar Aerial Co.

Aeronautical Activities: Handled motor sales through U. S. also abroad; presented hundreds of exhibitions throughout U. S. and Canada; operated school; promoted corporations and projects; designed, constructed and flew aeroplanes; designed and operated the first folding wing biplane and seaplane; commercial aero photography; intercity passenger service.

War Service: Naval Reserves, detached for design and organization of facilities; passed to Naval Air Service.

Member: Michigan Commercial Aero Association.

Present Occupation: Flying and Manager, Solar Aerial Co.

Address: 5216 Trumbull Ave., Detroit, Mich.

William A. Pattishall

PATTISHALL, WILLIAM A., Attorney at Law; born, Geneva, Fla., March 21, 1896; son of H. H. Pattishall and Annie (Gradick) Pattishall; married, J. Irene Smith, June 23, 1921.

Educated: Sanford (Fla.) High School, 1913; Columbia University, New York, 1913-1914; John B. Stetson University, DeLand, Fla., 1914-1917, B. S. 1917; LL.B. 1920, Stetson University.

Professional: Practice of Law since June 1920 in Orlando, Fla.

Aeronautical Activities: S. of M. A. Atlanta, Ga., Aug. 11, 1917 to Oct. 13, 1917; 2nd Av. Inst. Center Tours, France, Nov. 17, 1917 to Jan. 8, 1918; St. Maxiant with the "famous" Beaumont Detachment of Cadets, Jan. 8 to March 29, 1918; hospitals, six months ending Aug. 28, 1918; third Av. Inst. Center, Issoudun, Sept. 17, 1918 to Jan. 10, 1919, where trained entirely on Nieuports.

Flying Rating: Reserve Military Aviator, Nov. 15, 1918.

War Service: U. S. Army, May 13, 1917 to May 7, 1919.

Member: College and Law Fraternities.

Present Occupation: Attorney at Law.

Address: Orlando, Fla.

Samuel Hollingsworth Paul

PAUL, SAMUEL HOLLINGSWORTH, Manufacturing; born, Chestnut Hill, Philadelphia, Pa., July 5, 1896; son of Mr. and Mrs. Henry N. Paul.

Educated: Northeast High School, Philadelphia, Pa.; Cornell University.

Aeronautical Activities: Received instruction at Essington, Pa. on flying boats, 1917; instructed in aerobatics at Lake Charles; commissioned Captain and Flight Commander of 138th Aero Squadron; gunnery instruction at Issoudun, France.

Flying Rating: Reserve Military Aviator.

War Service: Feb. 1916-Sept. 1916, American Ambulance Field Service; May 1917-Aug. 1919, U. S. Army.

Member: Aero Club of Pennsylvania; Aviators Club of Philadelphia.

Present Occupation: Gen. Mgr., G. T. Sutterley & Co.

Address: 1720 N. 2 Street, Philadelphia, Pa.; home, Chestnut Hill, Philadelphia, Pa.

George Hume Peabody

PEABODY, GEORGE HUME, Major, Air Service; born, Shinglehouse, Pa., Nov. 24, 1893; son of Albert Francis Peabody and Anna (Johnston) Peabody; married, Helen MacShane, June 15, 1915.

Educated: Grammar and High Schools; U. S. Military Academy, 1915.

Professional: Cadet U.S.M.A. June 14, 1911 to June 11, 1915; 2d Lt., 3d Cavalry, June 12, 1915; 1st Lt. July 1, 1916; Captain, July 3, 1917; Aviation Section and Air Service, Sept. 1, 1917 to date; Major, Air Service, July 2, 1920.

Aeronautical Activities: Student, Rockwell Field, Sept. 1, 1917 to Dec. 13, 1917; Officer in Charge Flying, Eberts Field, March-June 1918; Officer in Charge Training, March Field, Dec. 1918 to date; also on duty for short time at Ellington

Member: Phi Kappa Psi Fraternity; Army and Navy Club (Wash.); Lambs Club (N. Y.); American Legion.

Present Occupation: Administrative Executive, Office, Chief of Air Service.

Address: Munitions Bldg.; home, 1716 21st St., Washington, D. C.

Llewellyn Bradley Peck

PECK, LLEWELLYN BRADLEY, Newspaper Editor; born, Shantung, China, Jan. 13, 1886; son of Dr. Albert Palmer Peck and Celia (Flagg) Peck; married, Lida P. O'Bannon, Nov. 28, 1918.

Educated: Pomona College.

Aeronautical Activities: Graduate of Army Balloon School and School of Military Aeronautics, Berkeley, Calif.

War Service: 1916-1919.

Member: Allied Fliers' Club.

Present Occupation: Assistant Editor, Berkeley Gazette.

Address: 2048 Center St.; home, 1160 Coluse Ave., Berkeley, Calif.

Norman W. Peek

PEEK, NORMAN W., Major, Air Service; born, Oshkosh, Wis., July 13, 1885; son of Herman W. Peek and Sophie (Dichman) Peek; married, Olive Anne Savage.

Educated: Public schools of Oshkosh, Wis.; St. John's Military Academy, Delfield, Wis.

Aeronautical Activities: Detailed in Aviation Section, Signal Corps, 1916; student at Signal Corps Aviation School, San Diego, Calif., 1916-1917; President, Board of Officers, selecting balloon and seaplane sites for coast defenses of the Gulf and Atlantic Coasts, 1918; constructed and commanded Emerson Field; commanded Air Service Troops at Camp Jackson, 1918; organized and commanded Pope Field; Engineering Officer, Ellington Field, 1919.

Member: Air Service Examining Board, Van Couver Barracks, 1920.

Flying Rating: Junior Military Aviator, June 1917; Spherical Balloon Pilot, Jan. 1921; Balloon Observer, March 1921; Airship Pilot, May 1921.

War Service: As above.

Present Occupation: Major, Air Service.

Address: Langley Field, Hampton, Va.; home, 521 Belleview Place, Milwaukee, Wis.

Roy Victor Peel

PEEL, ROY VICTOR, Teacher; born, Des Moines, Iowa, July 26, 1896; son of Victor R. Peel and Hannah M. Peel.

Educated: East Des Moines High School; A.B. 1920, Augustana College.

Professional: Representative Carpenter Paper Co., 1920; Sept. 1920 to date, Instructor, English, Trinity College.

Aeronautical Activities: Cadet, Jan. 1918 to Feb. 1919; training at Dallas, Tex., Ithaca, N. Y., Ft. Sill, Okla. and Post Field.

Flying Rating: Airplane Pilot.

Present Occupation: Teacher.

Address: Round Rock, Tex.; home, 1503 Pennsylvania Ave., Des Moines, Iowa.

Robert Kenneth Perry

PERRY, ROBERT KENNETH, Student; born, Bound Brook, N. J., Sept. 1, 1899; son of David M. Perry and Sara Mae (Dunning) Perry.

Educated: Bound Brook public schools; Bordentown Military Institute; Williams College.

Aeronautical Activities: Ground School at Princeton and Austin, Tex.; Flying School at March Field, Riverside, Calif.; Secretary of the Intercollegiate Flying Association;

Flying Rating: Reserve Military Aviator.

Member: Williams Club, New York, N. Y.

Present Occupation: Student.

Address: 3 Maiden Lane, New York, N. Y.; home, River Road, Bound Brook, N. J.

C. G. Peterson

PETERSON, C. G., Commercial Aviator; born, Buffalo, N. Y., Oct. 16, 1883; son of Charles Peterson and Jennie (Lapham) Peterson; married, Hildegrade Rogers, Aug. 7, 1918.

Educated: Public schools of New York City and Lockport, N. Y.; Mech. Eng. 1906, Cornell University.

Professional: Engineering.

Aeronautical Activities: Organizing and direct-



Mason M. Patrick

Field, M.I.T., Boston, and Wilbur Wright Field, Dayton, Ohio, and O.D.A.S.

Flying Rating: Junior Military Aviator, Dec. 13, 1917; Airplane Pilot, June 1920.

Present Occupation: Officer in Charge of Training, Air Service Pilots School, March Field, Calif.

Address: March Field, Calif.; home, 502 E. 22nd St., Cheyenne, Wyo.

William F. Pearson

PEARSON, WILLIAM F., Major, Air Service; born, Washington, Ohio, Nov. 1, 1880; son of William H. Pearson and Marietta A. (Arnold) Pearson; married, Elisa E. Wadhams, Feb. 22, 1908.

Educated: Private Grammar School; High School, Delaware, Ohio; Ohio Wesleyan University.

Professional: Private, Corporal and Sergeant, 28th Battery Field Artillery, U. S. A., Feb. 22, 1902 to Oct. 4, 1904; 2nd Lt. 25th Inf., Oct. 5, 1904; transferred to 9th Inf., May 5, 1905; transferred to 23d Inf., April 26, 1910; promoted First Lieut., March 11, 1911; transferred to 8th Inf., Jan. 1, 1915; promoted Captain, July 1, 1916; transferred to 41st Inf., June 9, 1917; appointed Major, Signal Corps, Aug. 5, 1917; appointed Lt. Col. Signal Corps, Feb. 26, 1918; appointed Col., Air Service, May 24, 1919; Major, Air Service Regular Army, July 1, 1920.

Aeronautical Activities: Detailed with Signal Corps, Aug. 5, 1917; assigned to duty as Commanding Officer, School of Military Aeronautics, University of Illinois, Oct. 1, 1917; assigned to duty, commanding officer, Aviation General Supply Depot, San Antonio, Tex., Aug. 21, 1918; Office, Chief of Air Service, Dec. 26, 1918; Administrative Executive, Air Service, continuously from Jan. 9, 1919 to date.

ing campaign for sale of surplus Navy aeronautical material; Wright Aeronautical Corp., administrative, sales and service.

War Service: U. S. Navy Engineering duties, July 1917 to July 1920.

Member: Aeronautical Chamber of Commerce; Cornell Club (New York); Toronto University Club; Society of Automotive Engineers.

Present Occupation: Assistant to President, Wright Aeronautical Corp.

Address: 236 Lewis St., Paterson, N. J.; home, 620 West 122 St., New York City.

Harold G. Peterson

PETERSON, HAROLD G., Commercial Aviation; born, Hutchinson, Minn., July 4, 1894; son of S. G. Peterson.

Educated: Grade and High School, Redwood Falls, Minn.; Valparaiso University, Architectural Engineering, 1914-1917.

Aeronautical Activities: Built glider at Redwood Falls, Minn. and made numerous successful glides, 1912; built monoplane, engine not powerful enough for successful flight, 1914-1915; enlisted as Cadet, Air Service, Oct. 27, 1917; graduated, Ground School, Champaign, Ill., Oct. 27, 1917; primary training, Chanute Field, to Dec. 15, 1917; commissioned 2nd Lieut., Ellington Field, Feb. 8, 1918; instructor, advanced acrobatics, Ellington Field, Feb. 15 to July 1, 1918; pilot, ambulance plane, July to Oct. 1918; finished night bombing course, Oct. 1918; Instructor, R.M.A. stage, accuracy and acrobatics, Nov. 1918 to June 1919; Border Patrol, 11th Aero Squadron, Fort Bliss, June to Aug. 9, 1919, Flight B, Marfa, Tex., Aug. 9, 1919; forced landing 125 miles in Old Mexico, near Publito, on the desert, captured by bandits Aug. 13, held for ransom with Lieut. Paul Davis, Aug. 18, for \$15,000 at Candelaria, Tex.; punitive expedition into Mexico, Aug. 19 to Aug. 24, 1919; member Flight A, 104 Aero Squadron, discharged, Feb. 28, 1920; Chief Instructor, Federated Fliers, Inc., Minneapolis, Minn., March to Dec. 1, 1920; Chief pilot and instructor for Harold G. Peterson Aircraft Co., White Bear Lake, Minn., to date.

Flying Rating: Reserve Military Aviator, Feb. 8, 1918; Airplane Pilot, 1919; Aero Club of America Certificate No. 2175, Sept. 4, 1918.

War Service: Oct. 27, 1917 to Feb. 28, 1920.

Books: Held for Ransom, *Colliers Weekly*, by Peterson and Davis.

Member: Aero Club of Minneapolis; Army and Navy Air Service Association.

Present Occupation: President and Chief Pilot, Harold G. Peterson Aircraft Co.

Address: 85½ South 10 Street; home, Aero Club of Minneapolis, Minneapolis, Minn.

Paul Stetson Phenix

PHENIX, PAUL STETSON, Division Freight Agent; born, Portland, Me., Jan. 8, 1894; son of Charles E. Phenix and Angeline G. (Stetson) Phenix.

Educated: Public schools of Brockline, Mass.; Exeter Academy, N. H.; A.B. 1916, Yale University.

Professional: Baltimore and Ohio Railroad, special agent in commercial development, 1917; Industrial Survey Agent, Baltimore and Ohio Railroad.

Aeronautical Activities: Army Air Service, 1917-1918; Cornell Ground School and Kelly Field.

Flying Rating: Reserve Military Aviator.

War Service: As above.

Member: American Flying Club of Baltimore.

Present Occupation: Division Freight Agent; Baltimore and Ohio Railroad.

Address: Cumberland, Md.

Walter Henry Phipps

PHIPPS, WALTER HENRY, Aeronautical Engineer; born, Cleveland, Ohio, May 19, 1892; son of Charles W. Phipps and Eva French Phipps.

Educated: Public schools of New York; Rugby School, Rugby, Eng.; Institute Dr. Schmitt, St. Gallen, Switzerland; Stevens Institute Prep., Hoboken, N. J.; resigned to enter aeronautics.

Professional: Designer and builder of airplanes since 1913.

Aeronautical Activities: Student of Aviation since 1910; Designer of the M. F. P. steel airplane, 1915; Designer of "Orenco" military and sporting airplanes.

Member: Aero Club (N. Y.); Society Automotive Engineers (N. Y.); formerly Associate Editor "Aircraft".

Present Occupation: Designer and Chief Engineer, Ordnance Engineering Corporation.

Address: Baldwin, Long Island, N. Y.

Raymond Chapman Pierce

PIERCE, RAYMOND CHAPMAN, Consulting Engineer; born, Hornell, N. Y., May 19, 1887; son of William O. Pierce and Sarah (Chapman) Pierce; married, Leona Ruth Hunter, June 5, 1918.

Educated: Hornell High School; B.S. in M.E. 1909, University of Pennsylvania.

Professional: Mechanical Engineer from 1909 with Field Force Pump Co., Erie R.R. Co. and Linde Air Products Co.; commissioned Captain,

pilot, instructor and translator of foreign correspondence, 1910-1914; in connection with this work and during this period, was sent to Belgium and Austria for test and demonstration flying, to the Balkans in charge of the Royal Serbian Flying Corps during the first Balkan war (5 months), to Egypt for test flying and operating a small flying school (3 months), to Scotland to organize Lieut. Tryggve Gran's flight across the North Sea; worked for Curtiss Aeroplane and Motor Corp. as test pilot, Hammondsport, N. Y., as flight instructor, Toronto, Canada, and as aircraft inspector, Buffalo, N. Y. (6 months), 1915; President and Chief Engineer, S. S. Pierce Aeroplane Corp., Southampton, L. I., N. Y., 1916-1917.

Flying Rating: Pilot's license, March 23, 1911, Aero Club of France.

War Service: Commanding Officer Aeronautic Section, 2nd Battalion, Naval Militia, N. Y.;

Flight Instructor at Bayshore, N. Y.; Theoretical Instructor at Armory during winter drill periods (1 year); on duty at Naval Air Station, Bayshore, N. Y. (7 months); promoted to Lieut. N. N. V., June 8, 1917; attached to Office of Superintendent, Constructor of Aircraft, U. S. N., in New York (2 years) on duty at Naval Aircraft Factory, Philadelphia, Pa. (1½ years).

Member: Aero Club of America; New York Yacht Club.

Present Occupation: Lt. U.S.N. R.F. Ass't, Chief Engineer, Naval Aircraft Factory.

Address: Navy Yard, Philadelphia, Pa.; home, 53 West 54th Street, New York.

Charles McHenry Pond

POND, CHARLES MCHENRY, Engineer; born, Berkeley, Calif., Dec. 18, 1882; son of Rear Admiral Chas. Fremont Pond and Emma (McHenry) Pond; married, Inez Virginia Henderson, Oct. 15, 1919.

Educated: Public schools Berkeley, Calif. and New York City; Oahu College, Honolulu, T. H.; 1908, University of California.

Professional: Engineering and exploration, railroad location, irrigation, and reclamation, from 1906 to 1914.

Aeronautical Activities: Learned to fly with Glenn H. Curtiss at San Diego during the years 1914-1915; draughtsman at Curtiss Aeroplane Co. at Buffalo, N. Y. from Sept. 1915 to Jan. 1916; engaged in experimental work with Curtiss Aeroplane Co. at Newport News from Jan. 1916 to May 1916; draughtsman for Grinnell Aeroplane Co., Grinnell, Iowa, May to Aug. 1916.

Flying Rating: Aviator's Certificate No. 337, F.A.I., Aero Club of America.

War Service: Instructor in flying, U. S. Air Service, Oct. 1916 to Jan. 1919 (civilian instructor).

Member: Pacific Aero Club; Arctic Brotherhood, Sitka, Alaska.

Present Occupation: Aviator and engineer.

Address: 4 East North St., Stockton, Calif.; home, 2621 Ridge Road, Berkeley, Calif.

Harold Linder Pope

POPE, HAROLD LINDER, Engineer; born, Newton, Mass., Nov. 5, 1879; son of Colonel Albert Augustus Pope and Abby (Linder) Pope; married, Clara Belle Hinkley, March 16, 1901.

Educated: 1898, Peekskill Military Academy; 1902, Mass. Inst. of Tech.

Professional: 1903-1905, Assistant Superintendent, Pope Mfg. Co., Hartford, Conn.; 1905-1907, Factory Manager, Pope Mfg. Co., Hagerstown, Md.; 1907-1909, Factory Manager, Pope Motor Car Co., Toledo, Ohio; 1909-1910, Factory Manager, Matheson Motor Car Co., Wilkes-Barre, Pa.; 1910-1914, Factory Manager, Pope Mfg. Co., Hartford, Conn.; 1914-1916, Factory Manager, Ferro Machine and Foundry Co., Cleveland, Ohio; 1916-1918, Factory Manager, Wright-Martin Aircraft Corp., Los Angeles, Calif.; 1918 to date, Factory Manager, Wright Aeronautical Corp., Paterson, N. J.

Member: Engineers' Club (N. Y.); Hamilton Club (N. J.) Montclair Athletic Club; Society of Automotive Engineers; American Society of Mechanical Engineers.

Present Occupation: Factory Manager, Wright Aeronautical Corp.

Address: 238 Lewis St., Paterson, N. J.; home, 130 Edgemont Road, Montclair, N. J.

Harry Bigelow Porter

PORTER, HARRY BIGELOW, Construction Engineer; born, Hartwick, Iowa, Aug. 22, 1893;



Walter H. Phipps

S.R.C.A.S., Oct. 8, 1917 and ordered to Fort Omaha; invented Pierce Inflation Device for filling balloons, Pierce Flash Gun for training aerial observers, Pierce Propaganda Device for distributing propaganda from spherical balloons; designed hydrogen generating and compressing railroad car; Officer in charge of hydrogen plant until Feb. 1919; ordered to Akron, Ohio for work with dirigibles and in May to Langley Field as Officer in Charge of Hydrogen Plant.

Aeronautical Activities: Flying training, spherical and kite balloons and airships in connection with experimental and testing work.

Flying Rating: Balloon Pilot.

War Service: Oct. 1917 to Sept. 1919.

Member: American Society of Mechanical Engineers.

Present Occupation: Consulting Engineer.

Address: 30 East 42nd Street; home, 472 West 144th Street, New York, N. Y.

Samuel Stillman Pierce

PIERCE, SAMUEL STILLMAN, Lieut. U. S. Navy; born, Wellesley Hills, Mass., Jan. 23, 1887; son of Holden White Pierce and Mary (White) Pierce.

Educated: Volkman preparatory school (private), Boston, Mass.; Courses in Electricity, Navigation, and Marine Engineering, at Mass. Inst. of Tech.

Professional: Agent for Peerless, Cadillac, and Renault automobiles, Colorado Springs 1907-1908.

Aeronautical Activities: Designed, built and flew two gliders and one power monoplane at Colorado Springs, 1908-1909; worked for Bleriot Aeronautique Co. in France as mechanic, test

son of Charles G. Porter and Margaret Porter; married, Esther Sumner, July 12, 1919.
Educated: Public schools of Holly, Colo. and Boise, Idaho; B.S.E.E. 1914, E.E. 1919, Iowa State College.

Professional: Engineering, six years with Bell Telephone Co.; 1914-1921, Division Office, Des Moines, Iowa.

Aeronautical Activities: Air Service Radio School, Columbia University; Army Air Service one year.

Flying Rating: Reserve Military Aviator.

War Service: Oct. 1917 to Jan. 1919.

Present Occupation: Exchange Construction Engineer, Northwestern Bell Telephone Co.

Address: 1006 Grand St.; home, 1114 Locust St., Des Moines, Iowa.

James M. Porter, Jr.

PORTER, JAMES M., JR., Automobile Business; born, Easton, Pa., March 7, 1896; son of James Madison Porter and Mary Virginia (Drake) Porter.

Educated: Private schools; Lafayette College.

Professional: Automobile business.

Aeronautical Activities: M.I.T. Ground School; training and instructing, Pensacola, Fla.; land flying at Miami, Fla.; Campagne, Field B., Northern Bombing Group, France.

Flying Rating: Ensign, June 1918; Naval Aviator No. 655.

War Service: Northern Bombing Group, France.

Present Occupation: Automobile business.

Address: 243-49 N. 3rd St.; home 11 Chestnut Terrace, Easton, Pa.

Augustus Post

POST, AUGUSTUS, Aeronautical Expert; born, Brooklyn, N. Y., 1873; son of Augustus T. Post and Mary E. (Austin) Post.

Educated: Brooklyn Polytechnic Institute; B. A. 1895, Amherst College; Harvard Law School.

Professional: Banking with E. D. Shepard & Co., 1896-1900; Guy Bates Post Co., 1915-1917; Automobile Activities, 1898-1905.

Aeronautical Activities: Aero Club of America, (Charter) Incorporator 1905, Secretary and Treasurer; Flew at Hammondsport, N. Y. 1910; Sheepshead Bay, N. Y.; Squantum Meet, Boston, Harvard Aeronautical Society; Hawthorne Track Meet, Chicago, Ill.; Cleveland, O.; New Orleans, La.; Mobile, Ala.; Aide to Allan R. Hawley winner Gordon Bennett Balloon Race, 1910, 1172 miles, St. Louis to Lake Tschotogama, Quebec, American record; contestant 1907 and 1908 in Gordon Bennett Balloon Races; Aide to C. B. Harmon duration record for Free Balloons, 48 hr. 26 min., 1909; operated airship for Maj. T. S. Baldwin, 1909.

War Service: Organized Foreign Service Committee of the Aero Club of America, Paris 1917.

Books: Curtiss Aviation book.

Member: Aero Club of America (Charter); American Automobile Association (life member); Alpha Delta Phi Club; Musicians Club of N. Y.; Camp Fire Club of America.

Present Occupation: Secretary, Aero Club of America.

Address: 11 E. 38th St., New York.



Augustus Post



Otto Praeger

George Birkbeck Post

POST, GEORGE BIRKBECK, Commercial Aviation; born, New York City, Jan. 9, 1897; son of Abram S. Post and Ida C. Post.

Educated: Kirmayer School, New York City; three years of mechanical engineering at Cornell University.

Professional: Experimental Department, Standard Aero Corp., 1917; salesman, Packard Motor Car Co. of New York, 1920; Huff-Daland and Co., June 1920 to date.

Aeronautical Activities: Elementary training in Naval Flying Corps, Bayshore, L. I., 1918; advanced training at Pensacola, Fla. and instructor on HS boats; several hundred hours commercial flying in small boats; experimental flying in numerous land machines, training planes, etc.

Flying Rating: Naval Aviator Certificate No. 1198; Underwriters Laboratories Certificate No. 1012.

War Service: Machinist mate, U.S.N.R.F. from April 1917 to Oct. 1917; patrol work, aviation, Feb. 1918 to Jan. 1919; Lt. (j. g.) U.S.N.R.F.

Member: Aero Club of America.

Present Occupation: Aeronautical work.

Address: Huff-Daland & Co., Inc., Ogdensburg, N. Y.; home, 292 Riverside Drive, New York City.

Clifford Ross Powell

POWELL, CLIFFORD ROSS, Lawyer; born, Lumberton, N. J., July 26, 1893; son of Spencer H. Powell and Florence (Ross) Powell; married, H. Irene Emery, Nov. 3, 1916.

Educated: Mount Holly, N. J. High School, 1911.

Professional: Lawyer, admitted to practice in New Jersey and Federal Courts in 1914; actively engaged in practice in Mount Holly, N. J. since that time.

Aeronautical Activities: Took Observers' Course at Cazaux, France, Feb. 1918; flew in Tours, France during latter part of March; joined French 9th Bombardment Group, April 1918; participated in major operations, Somme Defensive, Aisne,

Oise-Aisne, St. Mihiel, and Meuse-Argonne, and various Defensive Sectors; Nov. 1918, became instructor in map reading, cross-country flying, etc. at 7th A.I.C., Clermont-Ferrand Bombing School.

Flying Rating: Aerial Observer, Feb. 1918.

War Service: July 1917 to Feb. 1919; in National Guard Feb. 1913 to date.

War Honors: Citation conferring Croix de Guerre in Escadre 12, French Army (star); Citation conferring Croix de Guerre in French Army (palm); "since his arrival in the Escadrille has made every bombardment bravely at all times and under all conditions; on June 1, 1918, attacked by a group of enemy planes, he was severely wounded, his plane riddled with bullets, and the control wires cut, yet he did not advise his pilot of his wounds until a landing had been made. During the battle and after, he showed the greatest courage, and showed more interest in the results of the encounter than in his wounds. In the course of the combat he shot down an enemy plane." (Order No. 11054 "D" Oct. 30, 1918. Petain, Commander in Chief).

Member: 7th A.I.C. Association; American Legion; Commercial Law League of America; N. J. State Bar Assn.

Present Occupation: Lawyer.

Address: 117 Main St.; home, 139 High St., Mount Holly, N. J.

Orlo Allen Powell

POWELL, ORLO ALLEN, Mechanical Engineer; born, Stuart, Nebr., July 30, 1895; son of Allen C. Powell and Anna C. Powell.

Educated: Public schools of Stuart, Nebr.; Bachelor of Science in Mechanical Engineering 1917, University of Nebraska.

Professional: 1917, 1919 to date, Mechanical Engineer, Cushman Motor Works, Lincoln, Nebr.

Aeronautical Activities: Dec. 1917 to March 1918, Ground School, Berkeley, Calif.; training at Camp Dick and Carlstrom Field, 1918; Flight Commander, Brooks Field, 1918-1919.

Flying Rating: Reserve Military Aviator, July 1918.

War Service: Dec. 1917 to Jan. 1919.

Member: Lincoln Aero Club.

Present Occupation: Mechanical Engineer, Cushman Motor Works.
Address: 21 and X Sts.; home, 2727 Summer St., Lincoln, Nebr.

Martin Aloysius Powers

POWERS, MARTIN ALOYSIUS, Chemical Engineer; born, Waukesha, Wis., Nov. 13, 1892; son of John J. Powers and Bridget Ellen Powers.
Educated: Grammar school; Fond du Lac, Wis., high school; B.S. 1917, Chemical Engineering, University of Wisconsin.
Professional: Chemical investigator with the New Jersey Zinc Co., 1917 to 1918; Assistant to Supt. of Chemical and Metallurgical plant, 1919-1921.
Aeronautical Activities: Cornell University, School of Military Aeronautics; Carruthers Flying Field.
Flying Rating: Reserve Military Aviator.
War Service: Jan. 1918 to Jan. 1919.
Present Occupation: Asst. Supt. of Strip Zinc Rolling Mill.
Address: 534 LaFayette Ave., Palmerton, Pa.

Otto Praeger

PRAEGER, OTTO, Aviation Expert; born, Victoria, Texas, Feb. 27, 1871; son of Herman Praeger and Louisa (Schultze) Praeger; married, Annie C. Hardesty, Feb. 27, 1897.
Educated: Public Schools, San Antonio, Texas; University of Texas.
Professional: 1889-1914, Newspaper Reporter; City Editor, News Editor and Washington Correspondent, Postmaster, Washington, April 1, 1913 to Sept. 1, 1915; Second Assistant Postmaster General, Sept. 1, 1915 to March 1921.
Aeronautical Activities: In charge of Air Mail Service, May 15, 1918 to March 1921.
Present Occupation: Commercial Aeronautics General.
Address: 5052 Grand Central Terminal, New York.

Ord Preston

PRESTON, ORD, Banking; born, St. Helena, Calif., Aug. 15, 1874; son of Albert William Preston and Mary Elizabeth (Ord) Preston; married, Frances J. Converse, June 7, 1902 (Died, Sept. 1, 1911), Carolyn M. Murray, Dec. 4, 1912.
Educated: Phillips Academy, Andover, Mass., 1894; A.B. 1899, Yale University.
Professional: Clerk in New York Stock Exchange Brokers office, 1900-1905; Member, New York Stock Exchange, 1905-1912; 1912 to date, Director, Washington Gas Light Co.; 1912 to date, Director, Union Trust Co., Washington, D. C.
Aeronautical Activities: 1st Lieut., Av. Sec. Sig. S.R.C., Jan. 1918; Captain, Air Service, Aug. 1919; Major, AS-ORC, April 1919; Executive Section, D.M.A.
War Service: As above.
War Honors: Special letter of commendation from Director of Air Service.



Ralph A. D. Preston

Member: University Club (N. Y.); Metropolitan and Chevy Chase (Wash.).
Present Occupation: Financial.
Address: 413 Tenth St., N. W.; home, 1822 R St., N. W., Washington, D. C.

Ralph Albion Drury Preston

PRESTON, RALPH ALBION DRURY, Investment Banking; born Natick, Mass., April 10, 1889; son of Edward C. Preston and Jennie F. Preston.
Educated: Public schools, Natick, Mass.; B. S. 1910, Mass. Inst. of Tech.
Professional: With the Goodyear Tire & Rubber Co., Akron, Ohio, July 1910 to May 1921.
Aeronautical Activities: Summer 1910, studied manufacture of aeronautical rubber products (balloon fabrics, etc.) in Great Britain; 1910-1915, in charge production and development aeronautical work, Goodyear Tire & Rubber Co., Akron, Ohio; Aug. 28, 1912, first flight in spherical balloon at Colorado Springs, Colo.; summer 1913-1914, Vice President and Pilot, Goodyear Aero Club, Akron, Ohio; July 4, 1913 aide to R. H. Upson, winning National Championship Balloon Race; Sept. 3, 1913, received F. A. I. spherical balloon pilot certificate; Oct. 12, 1913, aide to R. H. Upson, winning Gordon-Bennett International Balloon Race; July 11, 1914, won, with M. D. Tremelin aide, National Championship Balloon Race; Feb.-June 1917, supervisor of production of aeronautic goods at The Goodyear Tire & Rubber Co.; June 1917 to June 1918, Manager and Chief Pilot, Goodyear Balloon School, training first class of Navy officers of Naval Aviation detachment, Akron, Ohio, in operation of coast patrol dirigibles; June 1918 to Sept. 1919, service in U. S. N. R. F.; Oct. 1918, pilot (Major Smith, U. S. M. C. in command) Dirigible C-1, first airship flight from Akron to coast, route via Washington to Rockaway.
Flying Rating: Free balloon pilot No. 49; Dirigible pilot No. 8, Aero Club of America; Naval Aviator (dirigible) U. S. N. R. F.
War Service: Lieut. U. S. N. R. F., duty as test pilot and project engineer, attached to Bureau of C. & R., Navy Department, Washington, D. C., June 1918 to Sept. 1919.
Member: Aero Club of America; Society of Automotive Engineers; American Society Mechanical Engineers (Junior).
Present Occupation: With Dillon, Read and Co., N. Y.
Address: Allerton House, 45 E. 55 St., New York City.

James Frederick Prince

PRINCE, JAMES FREDERICK, Commercial Aviation; born, Roselle, N. J., Nov. 30, 1887; son of George S. Prince and Ida F. Prince; married, Vera G. Tiffany, Oct. 19, 1915.
Educated: Public schools of Yonkers, N. Y.; A.B. 1908, Columbia University.
Professional: Assistant Secretary, International Motor Co., 1912-1916; Assistant Treasurer and Treasurer, Curtiss Aeroplane & Motor Corp., Buffalo, 1916-1918; Secretary, Wright Martin Aircraft Corp., 1918-1919; Secretary, Treasurer, Wright Aeronautical Corp., 1919 to date.
Present Occupation: Secretary and Treasurer, Wright Aeronautical Corp.
Address: 238 Lewis St., Paterson, N. J.; home, 9 Gibson Place, Elizabeth, N. J.

Harvey Meredith Pugh

PUGH, HARVEY MEREDITH, Executive; born, Lincoln, Ill., Dec. 25, 1894; son of Charles H. Pugh and Edith P. Pugh; married, Lourene M. Mott, 1918.
Educated: Minneapolis and Denver graded Schools; University of Denver, Colo., one year and University of Colorado, three years.
Professional: Manager, Teachers Employment Agency before the war and afterwards to date; Same from graduation from University.
Aeronautical Activities: Ground School, Berkeley, Calif., Nov. 6, 1917; Rockwell Field, Calif., Jan. 1918 to Aug. 1918; March Field, O. I. C. 2nd Solo, Aug. 1918-Aug. 1919; had charge of night flying and second solo and first solo as instructor during the time of my commission, July 1918.
Flying Rating: R. M. A. while in service; now 1st Lt. Sig. R. C. A. S. Flying.
War Service: Nov. 6, 1917 as cadet to June 1918; Instructor, 2nd Lt. to Aug. 1919.
Member: Sec'y., Allied Fliers' Club, Berkeley, Calif.
Present Occupation: Manager, Employment Agency.
Address: Berkeley Bank Bldg., Berkeley, Calif.; home, 2615 Virginia St., Berkeley, Calif.

Ira A. Rader

RADER, IRA A., Major, Air Service; born, Mayten, Calif., July 30, 1887; son of Isaiah Rader and Josephine (Scott) Rader; married, Alice Kent, March 15, 1917.



Ira A. Rader

Educated: California grade schools; 1905, Alameda High School; one year, University of California; June 1911, U. S. Military Academy.
Professional: 2nd Lieut., 19th Infantry, June 13, 1911; 1st Lieut., Infantry, 1916; Captain, Infantry, 1917; Major, Aviation Section, Signal Corps, 1917; Lt. Col. (temp.), Air Service, 1918; Major, Air Service, July 1, 1920.
Aeronautical Activities: Graduate S. C. Aviation School, San Diego, Calif., 1915; pilot, 1st Aero Squadron during Punitive Expedition in Mexico, 1916; has flown all types of American planes.
Flying Rating: Junior Military Aviator, 1915; Military Aviator, 1918.
War Service: Commanded 7th Aviation Instruction Center, A. E. F. (bombing school) at Clermont-Ferrand, France, Nov. 1917 to Sept. 1918; attached to Day Bombardment Group, A. E. F., during St. Mihiel and Meuse-Argonne attacks, 1918.
Member: Various service clubs; Aero Club of Omaha.
Present Occupation: Major, Air Service.
Address: Fort Crook, Nebr.

Joseph F. Randall

RANDALL, JOSEPH F., Insurance and Bonding Business; born, Philadelphia, Pa., Aug. 12, 1882; son of John A. Randall and Mary E. Randall; married, Anna W. Foley, June 16, 1909.
Educated: Public schools of Phila.; LL.B. 1917, National University.
Professional: Electrical contracting business; Attorney at Law.
Aeronautical Activities: Enlisted Oct. 12, 1917; commissioned 1st Lieut., S.R.C., Dec. 1917; training at Kelly Field; flying instructor at Mincola, L. I.; Captain, Air Service when discharged in Sept. 1919; commissioned Major, Jan. 1920.
Flying Rating: Reserve Military Aviator, Oct. 1918.
War Service: Army, Oct. 1917 to Sept. 1919.
Member: University Club; City Club (Wash.).
Present Occupation: General Insurance and Bonding business.
Address: 725 Alber Bldg.; home, 3146-19th Street, N. W., Washington, D. C.

Howard Grant Rath

RATH, HOWARD GRANT, Banker; born, Ackley, Iowa, April 18, 1885; son of John Rath and Elizabeth (Moser) Rath.
Educated: Public schools and high school of Ackley, Iowa; Lake Forest College; A. B. 1907, Williams College.
Professional: Assistant Cashier, Rath State Exchange Bank, Ackley, Iowa, 1907-1909; partner of firm of Blankenhorn & Rath (investment bankers), 1910-1914; President, Howard G. Rath Co. (investment bankers), since 1914.

Aeronautical Activities: Acted as flight leading observer in First American Aerial Day Bombing Raid carried out against the Germans on June 12, 1918 at Dommary-Baroncourt; acted as flight leading observer with 96th Aero Squadron in Toul Sector from June 1918 until opening of St. Mihiel Offensive, also through St. Mihiel Offensive and Meuse-Argonne Offensive up to Armistice; acted as Operations Officer of First Day Bombardment Group through St. Mihiel and Meuse-Argonne Offensives.

War Service: Attached to 96th Aero Squadron working in Toul Sector in the St. Mihiel and Meuse-Argonne Offensives from June 10, 1918 until Armistice; commissioned 2nd Lt. A.S., Dec. 16, 1917, 1st Lt. A.S., Nov. 6, 1918, Capt. AS-ORC April 22, 1919.

War Honors: Distinguished Service Cross, Chamberlay, France, Sept. 13, 1918; citation: "for extraordinary heroism in action between Chamberlay and Kennes, France, Sept. 13, 1918, while acting as leading observer of a flight consisting of three airplanes, was attacked by fifteen enemy planes. In spite of the fact that the formation was surrounded by an enemy five times as large, carried out the mission successfully and bombed the objective. In the return running fight, he and his pilot continued the unequal fight, and succeeded in returning to their airdrome with valuable information."

Member: California Club; University Club, Los Angeles; Los Angeles Country Club.

Present Occupation: President, Howard G. Rath Co.

Address: 510 Security Bldg.; 2966 Wilshire Blvd., Los Angeles, Calif.

Albert Cushing Read

READ, ALBERT CUSHING, Commander, U.S.N.; born, Lyme, N. H., March 29, 1887; son of Joseph B. Read and Mary E. (Barker) Read; married, Bess A. Burdine, Jan. 30, 1918.

Educated: Naval Academy, Annapolis, Md. **Professional:** Graduated Naval Academy Class of 1907; Commissioned Ensign, Sept. 1908; Served in Navy since that date; now, rank of Commander, received Sept. 23, 1919.

Aeronautical Activities: Took up training in aviation, July 1915; various duties ashore and afloat in connection with aviation; commanded NC4 on Transatlantic Flight, May 1919.

Flying Rating: Naval Aviator. **War Honors:** Comendator Torre e Espada (Portugal); Royal Air Force Cross (British); Distinguished Service Medal (U. S.).

Books: Co-author with Comdrs. Westervelt and Richardson, "Triumph of the NC's."

Member: Aero Club of America; New York Yacht Club; Seawanhaka Corinthian Yacht Club; Chevy Chase (Md.); Army and Navy Club (Wash.).



Albert C. Read

Present Occupation: Naval Officer. **Address:** Navy Dept.; home, 1355 Newton St. N. W., Washington, D. C.

Samuel Reber

REBER, SAMUEL, Col., U. S. Army (retired); born, St. Louis, Mo., Oct. 16, 1864; son of Samuel Reber and Margaret M. (Reese) Reber; married, Cecelia S. Miks, Jan. 10, 1900.

Educated: Washington University; 1886, U. S. Military Academy; 1894 Johns Hopkins University.

Professional: In U. S. Army since graduation from West Point.

Aeronautical Activities: Ballooning and aviation; Chairman, Contest Committee, A. C. A., 1910-1913; in charge of aviation in U. S. Army, 1913-1916.

Flying Rating: Balloon pilot, A. C. A.

War Service: In Indian Wars; Spanish-American War; Santiago and P. R. Campaign; World War; with 88th and 28th Divisions and H. Q. 2nd Army.

War Honors: Officer de l'Etoile Noire.

Member: University Club (N. Y.); Army and Navy Club (Wash.); Chevy Chase Club (Wash.).

Present Occupation: (Retired) Army Officer and Consulting Engineer.

Address: 27 Van Dam St., New York, N. Y.

Charles Fraser Redden

REDDEN, CHARLES FRASER, Commercial Aviation; born, Buchanan, Mich., July 24, 1871; son of S. W. Redden and Sophia (Fraser) Redden; married, Ethel M. Gillies, April 24, 1900.

Professional: 1898 to 1905, General Sales Manager, Chasmar-Winchell Press; 1905 to 1912, General Eastern Manager, Automobile Division, Studebaker Co. of South Bend, Ind.; 1914, organized Redden Motor Truck Co.

Aeronautical Activities: President, Aeromarine Engineering and Sales and Airways Inc., April 1921; sent first flying boat on flight from Havana, Cuba to Montreal; down St. Lawrence to Toronto, then Great Lakes to Chicago and down Mississippi River and thence to Cuba; the longest commercial flight in the history of Aviation.

Present Occupation: President, Aeromarine Engineering and Sales Co. and Aeromarine Airways, Inc., April 1920.

Address: 1800 Times Bldg., New York City; home, Hotel Alvord, East Orange, N. J.

Roy Eustice Reed

REED, ROY EUSTICE, Manufacturing; born, Chanut, Kans., Feb. 16, 1895; son of Dr. J. J. Reed and Clara Reed.

Educated: Beloit High School, Beloit, Wis.

Aeronautical Activities: Air Service Mechanics School, Chicago, Ill., 1917-1918; Magneto Repair, Ellington Field; S.M.A., Berkeley, Calif.; Cadet at March Field, 1919; dual instruction under Lt. C. M. Riggberger.

Flying Rating: Reserve Military Aviator, May 1919; Pursuit Pilot.

War Service: U. S. Army Air Service, 1917-1919.

Present Occupation: Sales Manager, Beloit Bur Mfg. Co.

Address: 1256 Clay St., Beloit, Wis.

Henry J. E. Reid

REID, HENRY J. E., Engineer; born, Springfield, Mass., Aug. 20, 1895; son of Henry Reid and Sophia (Page) Reid; married, Mildred Woods, June 26, 1920.

Educated: Public schools of Springfield, Mass.; Technical High School; B.S. in E.E., Worcester Polytechnic Institute.

Professional: Automobile drafting and railroad engineering at Westinghouse, 1919-1920; in charge of Maintenance Dept. Noiseless Typewriter Co., 1920-1921; 1921, Instrument Section, National Advisory Committee for Aeronautics.

Aeronautical Activities: 1921, Observer and instrument design.

Member: Associate member, American Institute of Electrical Engineers.

Present Occupation: In charge Instrument Section, N.A.C.A.

Address: N.A.C.A. Langley Field; home, Sinclair Road, Hampton, Va.

George Everett Adams Reinburg

REINBURG, GEORGE EVERETT ADAMS, Major, Air Service; born, Washington, D. C., Sept. 25, 1888; son of Louis C. Reinburg and A. V. Reinburg; married, Sarah E. Hunter, May 1916.

Educated: Public schools, Washington, D. C.; Central High School; Army and Navy Academy; George Washington University.

Professional: Commissioned 2nd Lieut., 9th U. S. Cavalry, April 22, 1912.

Aeronautical Activities: Pilot and Officer in Charge of Flying, 1st Aero Squadron, Punitive Expedition, Mexico, 1916; organized several avia-



Charles F. Redden

tion schools in U. S.; Commanded Bombardment Group on front in France.

Flying Rating: Junior Military Aviator, San Diego, Calif., June 1916; Military Aviator.

War Service: Pilot, Pursuit Group on 1st Army front, Sept. and Oct. 1918; organized and commanded 2nd Day Bombardment Group on 2nd Army front in France, Oct. and Nov. 1918.

Books: Manual, U. S. Air Service; Bombardment Pilot's Manual.

Member: Sigma Chi Fraternity, Pan Hellenic Association.

Present Occupation: Major, U. S. Air Service.

Address: Wilbur Wright Field, Dayton, Ohio.

Alvin Carl Reis

REIS, ALVIN CARL, Lawyer; born, Evansville, Ind., March 24, 1892; son of Henry Reis and Caroline (Blass) Reis; married, Olive Reeder, May 14, 1917.

Educated: Evansville High School; A. B. 1913, University of Wisconsin; LL.B. 1917, Harvard Law School.

Professional: Lecturer, 1913-1914; Lawyer, 1919 to date.

Aeronautical Activities: Flying with 26th and 84th French Balloon Companies; Asst. Commander, Balloons, Zone of Advance and First Army, 1918; Commanding Balloons, Fifth Army Corps also Third Army Corps, Oct. 1918 to May 1919.

Flying Rating: Reserve Military Aeronaut.

War Service: A. E. F., Dec. 1917 to July 1919; Aisne-Marne, St. Mihiel, and Meuse-Argonne offensives.

Present Occupation: Assistant Attorney-General, State of Wisconsin.

Address: State Capitol; home, 2262 West Lawn Ave., Madison, Wis.

Harry Leslie Remington

REMINGTON, HARRY LESLIE, Farmer; born, Stanberry, Mo., May 3, 1894; son of Howard Coe Remington and Martha Remington.

Educated: Public and high schools of Minot, N. D.

Aeronautical Activities: Artillery Observation School, Camp De Souge, France; Second Aviation Instruction Center, Tours, France; 2nd Corps Aero School, Chatillon sur Seine, France; Observer, 1st Aero Squadron.

Flying Rating: Aerial Observer.

War Service: National Guard, July 1917 to March 1918 in U. S. and France; Air Service, Sept. 1918 to July 1919.

Present Occupation: Student, California Institute of Technology, Pasadena, Calif.

Address: 3353 31 St., San Diego, Calif.

Frederick Brant Rentschler

RENTSCHLER, FREDERICK BRANT, Commercial Aviation; born, Hamilton, Ohio, Nov. 8, 1887; son of G. A. Rentschler and Phoebe S. Rentschler; married, Faye Belden, July 25, 1921.

Educated: 1909, Princeton University

Professional: 1910-1917, Hooven-Owens-Rentschler Co. and Hamilton Foundry and Machine Co., Hamilton, Ohio.; 1917-1918, Captain, A.S., A.P. Production of Aeronautical Engines and

Planes; District Manager, Aircraft Production, New York District.

Member: Aero Club of America; Aeronautical Chamber of Commerce.

Present Occupation: President, Wright Aeronautical Corp.

Address: 238 Lewis St., Paterson, N. J.; home,

Clearton H. Reynolds

REYNOLDS, CLEARTON H., Captain, Air Service; born, Provincetown, Mass., Jan. 29, 1888; son of Lina R. Reynolds; married, Elizabeth H. Reeside, Dec. 30, 1919.

Educated: B.S. 1912, Dartmouth College.

Professional: Supervisory and Engineering work, American Telephone and Telegraph Co., 1913-1916.

Aeronautical Activities: Flying training, 1st Provisional Aero Squadron, N. Y., May 1916 to Nov. 1916; student instructor, aviation station, Mineola, N. Y., Nov. to Feb. 1917; commissioned, Aviation Section Signal Corps, Jan. 1917; overseas with 1st Aero Squadron; returned March 1919; office, D.M.A. March 1919 to June 1919; Langley Field, July 1919 to date; completed course, Air Service Field Officers School, June 1921.

Flying Rating: Airplane Pilot.

War Service: Overseas with A.E.F., Aug. 13, 1917 to March 17, 1919.

War Honors: Distinguished Service Cross.

Member: Aero Club of America; Society of Automotive Engineers.

Present Occupation: Captain, Air Service.

Address: Langley Field, Va.

Charles Robert Rhodes

RHODES, CHARLES ROBERT, Farmer; born, Golden Lake, Ark., Sept. 12, 1888; son of J. W. Rhodes and Clara (Pulliam) Rhodes; married, Elizabeth Rissler, June 12, 1912.

Educated: B.E.E. 1909, University of Arkansas.

Professional: 1909-1921, Farmer.

Aeronautical Activities: Naval aviator and patrol pilot.

Flying Rating: Naval Aviator No. 711, July 8, 1918.

War Service: Navy, Oct. 1917 to Jan. 1919.

Present Occupation: Farmer.

Address: Golden Lake, Wilson, Ark.

Frank Bruner Rhodes

RHODES, FRANK BRUNER, Commercial Aviation; born, Frederick, Md., Jan. 17, 1867; son of Francis Thomas Rhodes and Eliza Jane Rhodes; married, Ida Wilmoth Adams, July 20, 1893.

Educated: Public schools of Frederick, Md.; Frederick College, 1883-1884.

Professional: Theatrical Business from Oct. 6, 1886 to April 12, 1917.

Aeronautical Activities: Field Supt., Gallaudet Aviation School, 1917; Advertising Manager, Gallaudet Aircraft Corp.

Present Occupation: Advertising Manager, Gallaudet Aircraft Corp.



Frederick B. Rentschler

Address: c/o Gallaudet Aircraft Corp., East Greenwich, R. I.; home, Bay View Ave., East Greenwich, R. I.

Harrison Henry Cocke Richards

RICHARDS, HARRISON HENRY COCKE, Major, Air Service; born, Petersburg, Va., April 26, 1897; son of Walter B. Richards and Mary M. C. Richards; married, Landonia Brock, June 14, 1916.

Educated: Public School and High School, Front Royal, Va.; Randolph-Macon Academy, Front Royal, Va.; U. S. Military Academy, June 13, 1911.

Professional: Cadet U. S. M. A., June 15, 1907 to June 13, 1911; Commissioned 2d Lt., June 13, 1911 to June 30, 1916; 1st Lt., July 1, 1916 to May 15, 1917; Captain Regular Army, May 15, 1917 to June 30, 1920; Major, July 1, 1920 to date; Major, National Army, June 10, 1918 to May 20, 1920.

Aeronautical Activities: Began training North Island, San Diego, Calif., Sept. 10, 1915; Pilot's license, March 1916.

Flying Rating: Junior Military Aviator, Aug. 1918; Airplane Pilot, Mar. 28, 1921.

War Service: U. S. Army, Regular, April 1917 to date; duty at Kelly Field, from April to July, 1917; Commanding Officer, School Military Aeronautics; Georgia School of Tech., Atlanta, Ga., July 4, 1917 to Oct. 24, 1917; Dept. Air Service Officer, S. E. Dept., Nov. 1917 to May 1918; Instruction at Rockwell Field, June 1, 1918 to Sept. 12, 1918; Officer in charge Training, Gerstner Field, Sept. 12 to Oct. 30, 1918; Hoboken Overseas Orders, Nov. 7, 1918.

Member: Cavalry Association; Air Service Association; Army & Navy Club (Wash.); Aero Club of America.

Present Occupation: Air Executive, Office of Chief of Staff, 78th Div., Organized Reserve.

Address: Riverton, Warren County, Va.

Charles Lepel Richardson

RICHARDSON, CHARLES LEPEL, Radio Instructor; born, Toronto, Canada, June 7, 1891; son of Charles Gordon Richardson and Helena Richardson; married, B. Louise Porter, July 11, 1916.

Educated: Public schools of Elizabeth, N. J.; Cross Hill Academy, Glasgow, Scotland; preparatory school of Elizabeth, N. J.; Provisional School of Instruction, Canadian Army.

Professional: Assistant Engineer, Dominion Metals, Toronto, 1909-1910; Chief Engineer, Metals Chemical Co., Welland, Canada, 1912-1916; Assistant to President, Nisco Chemical Co., New Market, N. J., 1917-1919; Maintenance Engineer, Cobolt Chemical Co., New Market, N. J., 1919-1920; conducted special experiments for American Smelting and Refining Co., 1921.

Aeronautical Activities: Model designer; received first prize at Toronto exhibition for a Bleriot No. 12 model in 1912; in charge of observation stations at Toronto flights of Count De Lesseps and Wright machines, 1912, instructor in aviation.

War Service: Sergeant and Instructor in Radio and Military Engineering, 1914; Engineer Officer, 1915; with 2nd Field Co. Canadian Engineers.

Member: Chemists Club, N. Y.; British Great War Veterans Association.

Present Occupation: Chief Radio Instructor, American Airways.

Address: College Point, Long Island, N. Y.; home, 407 Rahway Ave., Elizabeth, N. J.

Holden Chester Richardson

RICHARDSON, HOLDEN CHESTER, Commander, U. S. N.; born, Shamokin, Pa., Dec. 7, 1878; son of William A. Richardson and Elmira J. (Douty) Richardson; married, Margaret Jones, July 1908.

Educated: Shamokin High School, 1896; Naval Academy, 1901; M. I. T., 1906; M. S., 1907 (M. I. T.).

Professional: Naval Officer at sea 1901-1904; M. I. T. 1904-1907; 1907-1909, Ass't. Supt. Construction, Newport News; 1909-1911; Naval Constructor, Philadelphia Navy Yard 1911-1916; Bureau of Construction and Repair, Aviation, 1915-1917; Construction Officer, Naval Air Station, Pensacola, Fla., 1917-1919; Supt. Construction Bureau, Buffalo, N. Y., 1919, Chief Engineer, Naval Aircraft Factory, Philadelphia, 1919-1921.

Aeronautical Activities: Continuous since March 1912 at San Diego, Annapolis, Hammondsport, Pensacola, Washington, Buffalo, Rockaway, Philadelphia; Designed hulls for N. C. transatlantic seaplanes; Tested all N. C.'S and assisted in planning Transatlantic Flight; Pilot on Transatlantic Flight NC3.

Flying Rating: Naval Aviator No. 13, U. S. Navy.

War Honors: Navy Cross, Officer of the Tower and Sword, Portugal.

Member: Army and Navy Club, (Wash.); Naval Architects and Marine Engineers.

Present Occupation: Chief Engineer, Naval Aircraft Factory, Philadelphia.

Address: Navy Yard, Philadelphia; home 1007 Marlyn Road.



Holden C. Richardson

Leon Richardson

RICHARDSON, LEON, Shipping; born, Rose Valley, Pa., March 18, 1888; son of George Thomas Richardson and Rachel Richardson; married, Florence J. Eslinger, Jan. 17, 1918.

Educated: Public schools of Merchantville, N. J.; University of Washington.

Professional: 1906, Street Railway and Electric Light and Power at Winona, Minn.; Mills Aviators, 1907; Exploration in Arctic Ocean, Northern Alaska and Siberia, 1909; Steamshipping in Alaska, 1911-1914.

Aeronautical Activities: Begun flying in old Curtiss Pusher Types at Cicero or Hawthorne, Chicago in 1908-1919; later in 1910-1911 at Curtiss Field, San Diego, gave exhibition flying; engaged in building with Art. Smith, Nels Nelson and Victor Carlstrom, 1909; instructor at San Antonio and sent as one of the first flyers to open Wilbur Wright Field, remaining there until Dec. 1917; ordered to Washington and worked on instruction of pilots and bombers until end of war.

Flying Rating: Expert Pilot's Certificate.

War Service: Joined as private at Fort Monroe, Nov. 1916; promoted to Sergeant, 1st Lieut., Captain and Major, Nov. 1916 to 1919.

Books: "Bombing"; "Instruction in Flying and Aircraft Building".

Present Occupation: Assistant to the President, U. S. Mail Steamship Co.

Address: 610 Riverside Drive, New York City.

Isidor Richmond

RICHMOND, ISIDOR, Architect; born, Chelsea, Mass., Dec. 2, 1893; son of Hyman Richmond and Lena Richmond.

Educated: Public and high schools of Revere, Mass.; 1916, Mass. Inst. of Tech.

Professional: Architect.

Aeronautical Activities: M. I. T. Naval Aviation Ground School, Feb. 1918; Naval Air Station, Chatham, Mass., Aug. 1918 to April 1919.

Flying Rating: Naval Aviator, 1917.

War Service: Patrol duty, Naval Air Station, Chatham, Mass.; Lieut. (J. G.) U. S. N. R. F.

Present Occupation: Architect.

Address: Home, 69 Everard St., Beachmont, Mass.

Edward Vernon Rickenbacker

RICKENBACKER, EDWARD VERNON, Automobile Business; born, Columbus, Ohio, Oct. 9, 1889; son of William Rickenbacker and Elizabeth Rickenbacker.

Educated: Public and high schools of Columbus, Ohio.

Professional: 1908-1910, Mechanical engineering; 1910-1913, automobile business; 1913-1917, motor racing and engineering; 1917-1919, Army Air Service; 1919-1921 automobile business.

Aeronautical Activities: Took up flying in Tours, France, Aug. 1917 and was ordered to active service on Front, Jan. 1918; American Ace, officially credited with destruction of 25 enemy machines.

Flying Rating: Military Aviator.

War Service: May 1917 to Feb. 1919.

War Honors: Croix de Guerre (French) with four palms; Distinguished Service Cross with nine palms; French Legion of Honor.

Member: Detroit Athletic Club; Aero Club of America.

Present Occupation: Automobile manufacturing.

Address: Rickenbacker Motor Co.; home, Detroit Athletic Club, Detroit, Mich.

Howard M. Rinehart

RINEHART, HOWARD M., Aeronautical Engineer; born, Eaton, Ohio, March 16, 1885; son of Franklin B. Rinehart and Alma Rinehart; married, Miriam Dove, July 1914.

Educated: Eaton public school and high school; Naval Electrical College, Washington.

Professional: Wireless Construction Engineer; Through various parts Brazil 1905 until 1911 for Amazon Wireless Co., International Telephone & Telegraph Co. and the Brazilian Government.

Aeronautical Activities: Exhibition pilot 1912-1913; instructor and test pilot for Orville Wright, 1913-1915; Gen. Villa, Mexico, 1915; The Dayton-Wright Co., 1916-1921.

Flying Rating: Pilot since 1912.

Present Occupation: Pilot and assistant aeronautical engineer.

Address: Dayton-Wright Co., Dayton, Ohio, home, 650 Belmont Park, Dayton, Ohio.

Harry M. Rinker

RINKER, HARRY M., Airplane Pilot; born, Wakeeney, Kans., March 1, 1891; son of James M. Rinker and Virginia E. Rinker; married, Marjory Gibson, Jan. 6, 1918.

Educated: Public schools; Kansas University.

Aeronautical Activities: Commercial flying since discharged from army, passenger service; photography; exhibition and advertising.

War Service: Ground school, Austin, Tex. and Camp Dick; flying training, Benbrook Field, Wilber Wright Field, Payne Field, Gerstner Field, Barron Field, Post Field.

Flying Rating: Reserve Military Aviator.

Member: Aero Club of America.

Present Occupation: Commercial Flying.

Address: Wakeeney, Kans.

James Barbour Rixey

RIXEY, JAMES BARBOUR, Attorney at Law; born, Brandy Sta., Va., March 1, 1895; son of John Franklin Rixey and Ellen (Barbour) Rixey.

Educated: Force School, Washington, D. C.; Jefferson School, Ch'ville; 1912-1913, Hampden Sidney College; 1913-1917, University of Virginia; LL. B. Bachelor of Arts, 1919-1920, University of Virginia.

Professional: Practicing law since Sept. 1920.

Aeronautical Activities: Enlisted May 1917 at Ft. Myer, Va.; transferred in July 1917 to Princeton Ground School; sent to Mineola, L. I., Sept. 1917; commissioned, Dec. 14, 1917; transferred Gerstner Field, Jan. 1918; helped organize the Aerial Gunnery school at Gerstner Field; sent to Dorr Field as Officer in Charge, Air Section Aerial Gunnery School, June 1918; discharged, Dec. 1918 at Mineola as Aerial Gunnery Officer of the First Provisional Wing; 1st Lieut. S. R. C.

Flying Rating: 1920, Reserve Military Aviator.

War Service: Army, May 1917 to Dec. 1918.

Member: Aero Club of America.



Edward V. Rickenbacker

Present Occupation: Attorney at Law.

Address: 404 Cove St.; home, 1500 Colonial Ave., Norfolk, Va.

Louis Maurice Robb

ROBB, LOUIS MAURICE, Commercial Aviation; born, Merchantsville, N. J., Feb. 12, 1896; son of Daniel Robb and Marie F. Robb.

Educated: Abington Friends School, Jenkintown, Pa.; Mechanical Eng. 1916, Drexel Institute, College of Engineering.

Professional: Western Union Tel. Co., 1916-1917.

Aeronautical Activities: Army Air Service, 1917-1919; pilot and instructor for Philadelphia Aero Service Corp., 1919-1921; passenger carrying with F. T. Holl under name of Universal Air Service, 1921 to date; cooperated in the design and construction of the "Kelly Field Kootie" a motorcycle engine biplane, 1919.

Flying Rating: Reserve Military Aviator, Aug. 1918.

War Service: Army Air Service, Aug. 1917 to June 1919.

Present Occupation: Passenger carrying.

Address: Universal Air Service, Parkersburg, Pa.; home, 416 N. 40th St., Philadelphia, Pa.

Benjamin H. Roberts

ROBERTS, BENJAMIN H., Engineering; born, Eureka Springs, Ark., June 14, 1897; son of W. S. Roberts and Anna E. Roberts.

Educated: Eureka Spring High School; B.S. in E.E. 1917, Washington University, St. Louis, Mo.

Professional: General engineering practice, Secretary-Treasurer of Alexander Engineering Co. Inc. since 1919.

Aeronautical Activities: Completed flying training at Chateauroux, France, in May 1918; received French Brevet and completed flying training at Issoudun, France, in July 1918; attached to 155th Aero Squadron, Aug. 1918; made Commanding Officer of 155th Aero Squadron in Nov. 1918 and commanded squadron until discharged March 1919.

Flying Rating: French Brevet; Pilots License, Federation of Aeronautics International.

Member: American Association of Engineers.

Present Occupation: Secretary-Treasurer, Alexander Engineering Co.

Address: Rogers, Ark.; home, Eureka Springs, Ark.

Wendel Archibald Robertson

ROBERTSON, WENDEL ARCHIBALD, Insurance Agent; born, Guthrie, Okla., May 7, 1894; son of Robert Scott Robertson and Elizabeth Jane (Wendel) Robertson.

Educated: Fort Smith public schools and Holbrook School at Briarcliff, N. Y.; B.A. 1915, Yale.

Professional: Clear Creek Oil & Gas Co., 1915-1917; Robertson & Shadrach Insurance Co., 1920 to date.

Aeronautical Activities: S.M.A. Austin, Tex., July 1, 1917 to Aug. 15, 1917; flying field, Rantoul, Ill., Aug. 15, 1917 to Nov. 30, 1917; commissioned 1st Lieut., Dec. 1917 and assigned to 108th Aero Squadron; trained at Issoudun, France, in flying and at Cazeaux, France, in gunnery; assigned to 139th Aero Squadron, 2nd Pursuit Group, July 26, 1918; served with that squadron through the St. Mihiel and the Argonne Offensives; assigned to 13th Aero Squadron, Dec. 1, 1918 as C.O.; discharged, April 1919 at Garden City, L. I., N. Y. American Ace, officially credited with destruction of seven German planes.

Flying Rating: Reserve Military Aviator.

Present Occupation: Insurance Agent.

Address: 17 N. 6th St., Ft. Smith, Ark.



John K. Robinson, Jr.

Augustine Warner Robins

ROBINS, AUGUSTINE WARNER, Major, U. S. Army Officer; born, Gloucester, Va., Sept. 29, 1882; son of Colonel Wm. Todd Robins and Sally Nelson Robins; married, Dorothy Gretchen Hyde, Jan. 6, 1915.

Educated: Richmond High School, Richmond, Va.; Graduate U. S. Military Academy, West Point, N. Y.

Professional: Officer, U. S. Army; 2nd Lieut. 12th Cavalry, June 14, 1907; 1st Lieut. 12th Cavalry, Sept. 13, 1913; Major Air Service, July 1, 1920.

Aeronautical Activities: Major, Aviation Section Signal Corps, Aug. 5, 1917; Lt. Col., Air Service, Aug. 17, 1918; Junior Military Aviator, Aug. 9, 1918; Duty at Scott Field, Ill. and Park Field, Tenn. Oct. 1, 1917 to June 15, 1918; Commanded Scott Field, Ill., June 16, 1918 to Oct. 1, 1918; Supervisor Northern Air Service Dist., to Feb. 1, 1919; Chief Property and Requirements Divisions and Ass't. Chief Supply Group Air Service.

Member: Army and Navy Club, (Wash.), Army and Navy Club, Manila, P. I.; U. S. Air Service Association.

Present Occupation: C.O., Fairfield Air Intermediate Depot, Ohio.

Address: Air Service, Washington, D. C.; home, 3901 Northampton St., Chevy Chase, D. C.

John Kelly Robinson, Jr.

ROBINSON, JOHN KELLY, JR., Aircraft Manufacturer; born, Akron, Ohio, Oct. 15, 1879; son of John Kelly Robinson and Henrietta E. (Barber) Robinson; married, Elizabeth Hitchcock, April 9, 1901.

Educated: Chicago Public Schools; private schools of Twyford, England; St. Paul's School, Garden City, L. I.; Commercial College.

Professional: 1898-1899, Clerking; 1899-1903, Secretary, Carrara Paint Co., Barberton, Ohio;

1903-1908, Secretary, Ox Fibre Brush Co.; 1908 to date, President, Ox Fibre Brush Co.; 1919 to date, President, Gallaudet Aircraft Corp.; 1908 to date, Director, Secretary and now Vice President, National Coal Co., Cleveland, Ohio.

Aeronautical Activities: Officer and Director of the Gallaudet Aircraft Corp. since 1917. Treasurer and General Manager during the war; President since 1919, Manufacturers Aircraft Association.

Member: New York Yacht Club; New York Athletic Club; Green Meadow Country Club; Pelliham Country Club.

Present Occupation: Manufacturer.

Address: 522 Fifth Ave.; home, King St., Chappaqua, New York.

John M. Rogers

ROGERS, JOHN M., Aeronautical Engineer; born, Tonawanda, N. Y., Sept. 25, 1891; son of Edward H. Rogers and Jennie P. Rogers.

Educated: Public schools of Tonawanda, N. Y.; M.E. 1915, Cornell University.

Aeronautical Activities: Engineer, Curtiss Aeroplane and Motor Corp., 1915-1917; Engineer, Bureau of Construction and Repair, Navy Department, 1917-1918; Chief Engineer, Alexandria Aircraft Corp., 1918-1919; Sales Engineer and Quality Manager, Wright Aeronautical Corp., 1919 to date.

Member: Cornell Club of New York; Aero Club of America; Society of Automotive Engineers; Hamilton Club, Paterson, N. J.

Present Occupation: Quality Manager, Wright Aeronautical Corp.

Address: Wright Aeronautical Corp., Paterson, N. J.

Roland Rohlfs

ROHLFS, ROLAND, Airplane Pilot; born, Buffalo, N. Y., Feb. 10, 1892; son of Charles Rohlfs and Anna Katherine (Green) Rohlfs; married, Alta Helen Pearce, June 3, 1916.

Educated: Public schools of Buffalo; Nichols private school; Lafayette High School; Technical High School.

Professional: Experimental aviation test pilot.

Aeronautical Activities: Taught to fly by Victor Carlstrom; instructor two years; in charge Buffalo Curtiss Field, one year; experimental test pilot, four years; holds seaplane speed record; holds climbing record of 20,000 feet in ten minutes made eight altitude flights several about equalling world's record; American entrant Gordon Bennett Race 1920.

Present Occupation: Traffic Mgr., Aeromarine Airways.

Address: home, 156 Park St. Buffalo, N. Y.

Louis Montague Rolfe

ROLFE, LOUIS MONTAGUE Commercial Aviator; born, London, England, May 6, 1894; son of Louis Runnicles Rolfe and Elizabeth Rolfe; married, Florence Ann Mattingly, Feb. 20, 1917.

Educated: English private schools.

Aeronautical Activities: Partner, Rolfe Bros., Aero Model Builders, 1909-1914; experiments with gliders and power driven planes; first solo flight at age of 16; came to America, April 1914 and attended Curtiss Aviation School; three years exhibition work in middle west and south, 1915-1917; winters spent in building planes and operating flying schools; designer and builder of Rolfe exhibition, training, and commercial pusher and tractor biplanes and flying boats; pilot of every type of land plane, sea plane and flying boat; carried 5155 passengers without accident; personally trained many students; 1823 hr. in air as pilot; founder of Rolfe-Epps Flying Co., April 1919; Manager, Augusta Aircraft Co. Inc., Aug. 1920 to Apr. 1921; has flown in 23 states.

Present Occupation: Chief Pilot and Engineer, Campania Aerea Cubana.

Address: Cuba 58, Habana, Cuba; home, 153 Western Ave., St. Paul, Minn.

Edwin Mayo Ronne

RONNE, EDWIN MAYO, Commercial Aviation; born, Minneapolis, Minn., Nov. 28, 1898; son of T. E. Ronne and Anna (Mayo) Ronne; married, Grace Elmendorf, M.D., Feb. 21, 1920.

Educated: Public schools in Montana; B.S. in Electrical Engineering, 1917, University of Montana.

Aeronautical Activities: Ground School, Berkeley, Calif., 1917; primary training at Wilbur Wright Field; bombing training at Ellington Field, 1918; pursuit gunnery instruction, Arcadia, Fla.; Officer in Charge Flying, 271st Bombing Squadron, Aberdeen Proving Grounds, 1918; student, aeronautical engineering, M.I.T., 1918; pilot and factory student, Curtiss Aeroplane and Motor Corp., 1919-1920; manager of Curtiss Field, Buffalo, N. Y., 1921.

Flying Rating: Reserve Military Aviator, March 1918.

War Service: 1st Lieut., U. S. Army Air Service, May 1917 to March 1919.

Member: Secretary and Treasurer, Aero Club of Buffalo, N. Y.

Present Occupation: Curtiss Aeroplane and Motor Corp.

Address: 71 Kail St.; home, 1054 E. Ferry St., Buffalo, N. Y.



Roland Rohlfs

G. Hall Roosevelt

ROOSEVELT, G. HALL, Electrical Engineer; born, Neuilly, France, June 28, 1891; son of Elliot Roosevelt and Anna (Hall) Roosevelt; married, Margaret Richardson, May 17, 1913.

Educated: 1912, A.B., 1914, M.E., Harvard College.

Professional: Instructor, Graduate School of Engineering, Harvard University, 1913-1914; Substation Operator, Canadian Klondike Mining Co., Dawson City, Y. T., 1914-1915; Electrical Engineer, General Electric Co., power and mining, and railway applications 1916.

Aeronautical Activities: 1st Class Private, A. S. S. C.; enlisted July 11, 1917; Stationed at U. S. School of Military Aeronautics, Cornell University, Ithaca, N. Y. until Dec. 22, 1917; Gerstner Field, Lake Charles, La., until Aug. 6, 1918; Dorr and Carlstrom Fields, Arcadia, Fla., Aug. 6, 1918 to Jan. 1, 1919.

Flying Rating: Reserve Military Aviator.

War Service: 2nd Lieut., Air Service, May 3, 1918; 1st Lieut., S. O. R. C., Feb. 3, 1919.

Present Occupation: Electrical Engineer.

Address: General Electric Co., home, 211 Union St., Schenectady, N. Y.

Philip J. Roosevelt

ROOSEVELT, PHILIP J., Investments; born, New York City, May 15, 1892; son of W. Emlen Roosevelt and Christine (Kean) Roosevelt; unmarried.

Educated: St. Mark's School, Southboro, Mass.; A. B. 1913, Harvard.

Professional: New York Globe, 1913-1915; Aviation and Aeronautical Engineering, 1915-1917; War, 1917-1919; Banker Roosevelt and Son 1919.

Aeronautical Activities: 1st Aero Co. N. Y. N. G. 1915-16; Editor Aviation and Aeronautical Engineering 1916; Commissioned Air Service 1st Lt. May 1917; Captain, Aug. 1917; Major, Feb. 1919.

War Service: Overseas Oct. 1917-March 1919; Operations Officer 1st Pursuit Group; Operations Officer 1st Pursuit Wing Air Service.

War Honors: Croix de Guerre with palm, Citation G. H. Q., A. E. F. also Headquarters Army Group A. E. F.

Member: Aero Club of America (Governor), Harvard Club

Present Occupation: With Roosevelt and Son, Investments.

Address: 30 Pine St., New York; home, 804 Fifth Ave., New York.

Harmon Chadbourn Rorison

RORISON, HARMON CHADBOURN, Banker; born, Wilmington, N. C., April 15, 1893; son of Richard B. Rorison and Lizzie (Chadbourn) Rorison.

Educated: Union and Tileston High School, Wilmington, N. C.; University of Virginia; Jefferson School, Charlottesville, Va.; B.L. 1916, University of Georgia.

Professional: 1916-1917, Real Estate and Insurance, Wilmington, N. C.

Aeronautical Activities: Private course in flying at Staten Island Aviation School, 1917; Ohio State University Ground School; sent to Mineola for training; commissioned 1st Lieut., Nov. 18, 1917; trained at Issoudun on Nieuports; French Aerial Gunnery School at Caseaux; tested DH4's at Romorantin for several months; assigned to 13th Squadron 2nd Pursuit Group; transferred to 22nd Squadron 2nd Pursuit Group; discharged May 1919 and commissioned Captain, U. S. R.; Oct. 1919, returned to Europe and went to Poland and joined the Polish Flying Corps; served in Kosciuszko Squadron on many fronts as Flight Commander against the Russian Bolsheviks; attacked advancing Russian troop trains, also attacked Cavalry, especially Cossacks, machine gun nests and Infantry, all from very low altitudes; twice shot down in Russia, once fifty kilometers behind the Bolshevik lines; served as Lieutenant, and later promoted to Captain, Polish Army; returned to U. S. 1920.

Flying Rating: Reserve Military Aviator, Oct. 1917; Aero Club expert license; Polish Military Aviator; Airplane Pilot, Nov. 2, 1921.

War Service: U. S. Army, April 1917 to May 1919; Polish Army in Poland and Russia, Nov. 1919 to Aug. 1920.

War Honors: Distinguished Service Cross, Dec. 1918; Virtuti Militari, (Poland's highest decoration); cited by French: Krytz Walecznych, (Polish with three bars, signifying this decoration was awarded four times); Liberation de Pologne.

Member: Aero Club of America.

Present Occupation: Banker.

Address: Citizens Bank and Trust Co.; home, Oleander, Wilmington, N. C.

Joseph Robert Rosson

ROSSON, JOSEPH ROBERT, Newspaper Publisher; born, Scottsboro, Ala., May 31, 1896; son of Joseph Robert Rosson and Fannie (Hodges) Rosson.

Educated: Public schools of Cullman, Ala.; Cullman County High School; University of Alabama.

Aeronautical Activities: Graduated U. S. School of Military Aeronautics, Georgia Tech., Dec. 1917; 17th Squadron, completed pilot training, Park Field, Tenn., March 1918; Gunnery Instructor, Camp Dick; completed course at Issoudun, France, Aug. 1918; transferred to Aerial Gunnery School, St. Jean de Monts, France, as Instructor.

Flying Rating: Reserve Military Aviator, March 1918.

Present Occupation: Newspaper.

Address: 114 Third Avenue West; home, 912 First Avenue West, Cullman, Ala.

Harold Franklyn Rouse

ROUSE, HAROLD FRANKLYN, 1st Lieut., Air Service; born, Port Richmond, N. Y., Sept. 28, 1893; son of Franklyn S. Rouse and Carrie C. Rouse; married, Mary Louise Gilbert, Sept. 1, 1919.

Educated: Montclair, N. J. High School.

Professional: 1918-1917, Consultant-Industrial Safety Schedule Rating; 1917 to date, U. S. Army.

Aeronautical Activities: 1917, U.S.S.M.A., Princeton, N. J.; 1918, A. E. F. training with French and American Air Services; 1919, A. E. F. Staff duty with 3rd A. I. C., Issoudun, France; duty with Rents, Requisitions and Claims Service until Sept. 1919; duty at Mitchell Field, 1920 and 1921; duty at Langley Field to date.

Flying Rating: French Brevet, Ecole de Chartres, July 7, 1918.

War Service: Army, 1917 to date.

Present Occupation: 1st Lieut., Air Service.

Address: Langley Field, Va.

Wallace Arthur Rowell

ROWELL, WALLACE ARTHUR, Salesman; born, Menomonee Falls, Wis., July 7, 1888; son of George Wayne Rowell and Mary (Walsh) Rowell.

Educated: Grammar and high schools; Beloit College.

Aeronautical Activities: Entered army ground school, Austin, Tex., July 7, 1917; finished flying training at Kelly Field in Dec. 1917; started as instructor on dual stage, Kelly Field, Dec. 1917; commissioned 1st Lieut., Jan. 1918; instructed on dual stage until July 1918 when became assistant officer in charge of the dual stage; ordered to Bolling Field, Washington, D. C., Aug. 1918; Officer in charge of Field and Hangars at Bolling Field.

Flying Rating: Reserve Military Aviator, Jan. 26, 1918.

War Service: Enlisted, April 14, 1917; discharged as 1st Lieutenant, Feb. 17, 1919.

Present Occupation: Traveling Salesman for The International Harvester Co.

Address: Minneapolis, Minn.; home, 1497 Como Ave., W. St. Paul, Minn.

Ralph Royce

ROYCE, RALPH, Major, Air Service; born, Marquette, Mich. June 28, 1890; son of George A. Royce and Kate (Ely) Royce.

Educated: 1908, graduated Hancock Central High School, Hancock, Mich.; 1914, U. S. Military Academy.

Professional: Soldier; 2nd Lieut., 26th Infantry, June 12, 1914 to Sept. 22, 1915.

Aeronautical Activities: Student, Signal Corps Aviation School, Sept. 1915 to March 1916, San Diego, Calif.; Pilot, 1st Aero Squadron in Mexico and at border base, March 1916 to April 1917; Squadron Engineer Officer, Supply Officer, Adjutant and finally Commanding Officer; on duty at Pilot's School, Memphis and Chicago, two months; overseas 22 months.

Flying Rating: Aero Club of America Pilot Certificate, Dec. 1915; Junior Military Aviator, March 15, 1916; Military Aviator, March 15, 1919; Airplane Pilot, June 3, 1920.

War Service: C. O. 1st Aero Squadron to June 1918, also C. O. 1st Corps Observation Group, from organization to that date; Corps Air Service Officer to July 4th (1st Corps); Assistant in various Army Staff Air Service positions till Sept. 1st; Air Service Representative, 5th Sect. General Staff A. E. F. next ten months; Assistant Dept. Air Service Officer Southern Dept. the next year; C. O. Carlstrom Field, since Aug. 9.

Present Occupation: C. O. Carlstrom Field.

Address: Arcadia, Fla.

George Edwin Rumill

RUMILL, GEORGE EDWIN, Lieutenant U.S. N.R.F.; born, Mt. Desert Island, Me., Aug. 10, 1895 son of Edwin B. Rumill and Lettie A. Rumill.

Educated: Maine Central Institute, Pittsfield, Me.; Civil Engineering, University of Maine, 1916-1917.

Aeronautical Activities: Enrolled U.S.N.R.F., May 26, 1917; ground school, M.I.T., July 26, 1917; commenced flight training at Pensacola, Sept. 27, 1917; commissioned Ensign, Dec. 27, 1917; reported, R.N.A.S., Killingholme, England, Feb. 9, 1918; returned to U. S., Dec. 10, 1918; at Pensacola, Feb. 20, 1919 to March 29, 1919; inactive duty, March 30, 1919 to Sept. 1920; U.S.S. Shawmut, Sept. 1920 to date.

Flying Rating: Naval Aviator, No. 217, Oct. 30, 1917.

War Service: May 26, 1917 to March 30, 1919.

Honors: Special letter of commendation—"As pilot of a seaplane he carried out a large number of hazardous, war patrol flights in the vicinity of enemy coasts, with skill and daring".

Present Occupation: Lieut. (j.g.) and Prov. Lieut., U.S.N.R.F. (5).

Address: U.S.S. Shawmut, c/o Postmaster, New York; permanent, Indian Point, Me.

Harry Jennings Runser

RUNSER, HARRY JENNINGS, Commercial Aviator; born, Bluffton, Ind., July 23, 1890; son of John Runser and Anna Runser; married, Hilda Webb, April 3, 1914.

Educated: Public schools of Ft. Wayne, Ind. **Professional:** Contractor, interior decorator, 1912-1916; meat products, 1916-1917.

Aeronautical Activities: S.M.A., Austin, Tex. 1918; training at Chanute Field and Payne Field; commercial flying, March 1919 to Dec. 1921.

Flying Rating: Reserve Military Aviator.

War Service: Air Service, Aug. 1917 to Dec. 1918.

Member: Aero Club of America.

Present Occupation: Flying and lecturing.

Address: R. F. D. 7, Ft. Wayne, Ind.

Frank Henry Russell

RUSSELL, FRANK HENRY, Airplane Constructor; born, July 17, 1878; son of Frank Russell and Aurelia (Henry) Russell; married, Marietta Ford, Dec. 31, 1902.

Educated: Berkeley School; Bridgeport High School; A.B. Yale.

Professional: Manager of Sales of Laurentide Paper Co. in Grand Mere, Que.; President of Automatic Hook and Eye Co. of Hoboken; Manager of Wright Co., Dayton, Ohio; Manager, Vice President and President of Burgess Co. in Marblehead; Vice President of Curtiss Aeroplane & Motor Co.

Member: Yale Club; Eastern Yacht Club; Manhasset Bay Yacht Club; Aero Club of New England; Aero Club of America; University Club of Washington.

Present Occupation: Vice President and Manager of Curtiss Aero and Motor Corp.

Address: Rochambeau Apts., Washington, D. C.; home, 14 Gregory St., Marblehead, Mass.



Frank H. Russell

William Gray Schaffler, Jr.

SCHAFFLER, WILLIAM GRAY, JR., Commercial Aviation; born, Beirut, Syria, Nov. 24, 1891; son of William Gray Schaffler, Sr. and Eleanor (Hawks) Schaffler; married, Augusta Spring de Forest, Oct. 11, 1919.

Educated: Curtis School, Brookfield Center, Conn.; Taft School, Watertown, Conn.; 1909, Yale Forestry School S. C.; University of Wisconsin Agricultural School, S. C. 1910.

Professional: Two years cotton manufacturing, Newburyport, Mass.; Newspaper reporter; farmer; United States Forest Service as timber estimator; with New York Sporting Goods Co., New York City as camp goods salesman.

Aeronautical Activities: Commenced flying at San Diego, Calif. in fall of 1915; enlisted Aviation Section, Naval Reserve, March 1916; commenced training with Curtiss Aviation School, June 1916; enlisted Signal Reserve Corps, Nov. 1916 and received Army flying training.

Flying Rating: Aero Club of America Pilots License No. 575; Expert Pilots License No. 72; Airplane Pilot, 1920.

War Service: Commissioned 1st Lieut., S.O. R.C., March 17, 1917; duty 3rd Aero Squadron, April 3, 1917; duty First Aero Squadron, May 21, 1917 in U. S. A. and A. E. F.; first flight over German lines, April 2, 1918; Commanding Officer, 90th Aero Squadron, June 30, 1918, took part in St. Mihiel Drive and Meuse-Argonne Drive, 1918; promoted to Captain, Oct. 3, 1918; Commanding Officer, 3rd Corps Observation Group, Oct. 20, 1918; Assistant Chief of Staff, first Army Air Service, Dec. 6, 1918; Chief of Staff, First Army Air Service, Feb. 3, 1919; promoted to Major, April 9, 1919; returned to U. S. A., July 12, 1919; Commanding Officer, First Surveillance Group, Kelly Field, Aug. 31, 1919; Operations Officer, First Wing, Kelly Field, Oct. 25, 1919; discharged, Oct. 15, 1920.

War Honors: Croix de Guerre; received citations March 27 and June 3, 1919; Recommended for Distinguished Service Cross; credited with one enemy plane.

Member: Aero Club of America; Military Order of Foreign Wars; Veterans of Foreign Wars; Distinguished Service Order of The United States; Colonial Wars of N.S.

Present Occupation: Netherlands Aircraft Mfg. Co.

Address: Netherlands Aircraft Mfg. Co., 286 Fifth Ave. home, Sayville, L. I., N. Y.

Raymond J. Schirm

SCHIRM, RAYMOND J., Builder; born, Lafayette, Ind., April 22, 1896; son of Louis Schirm and Margaret A. (Dolan) Schirm.

Educated: Grammar and high schools of Los Angeles, Calif.

Professional: Portland cement industry.

Aeronautical Activities: U. S. Air Service; Ground School, University of California; training at Kelly and Taylor Fields.

Flying Rating: Reserve Military Aviator.

War Service: U. S. Air Service.

Member: Aero Club of Southern California; Los Angeles Athletic Club.

Present Occupation: Builder.

Address: 840 Commercial St.; home, 2801 Dalton Ave., Los Angeles, Calif.

Philip Schneeberger

SCHNEEBERGER, PHILIP, Lieut., Air Service; born, Baltimore, Md., Nov. 27, 1887; son of Henry W. Schneeberger and Sarah N. Schneeberger.

Educated: Public schools of Baltimore, Md.; Baltimore City College; A.B. 1909, Ph.D. 1913, Johns Hopkins University.

Professional: Research chemist, Barber Asphalt Paving Co., Maurer, N. J., 1913 to 1917.

Aeronautical Activities: Training, Aug. to Dec. 1918; on flying status, Dec. 10, 1918; Free Balloon and Airship training, Dec. 1918 to June 1919.

Flying Rating: Aerial Observer, Dec. 23, 1918; Free Balloon Pilot, July 2, 1919; License No. 834.

War Service: R.O.T.C., Aug. 25, 1917; commissioned in Air Service, S.C., Nov. 8, 1917; Regular Army Commission, Air Service, Sept. 18, 1920.

Books: "Fractionation of California Petroleum", 1913.

Member: Johns Hopkins Club; Aero Club of America.

Present Occupation: Lieut., Air Service.

Address: McCook Field, Dayton, Ohio; home, Seville Apt., Baltimore, Md.

Floyd Owen Schofield

SCHOFIELD, FLOYD OWEN, Real Estate Business; born, Macon, Ga., Jan. 19, 1896; son of Floyd Owen Schofield and Tibbie R. Schofield.

Educated: Public schools of Macon, Ga.; A.B. 1916, Mercer University, Macon, Ga.

Aeronautical Activities: Cadet, A.S.S.E.R.C., Jan. 1918; training at Camp Dick and Ellington Field to Feb. 1919; 2nd Lt., AS-ORC.

Flying Rating: Certificate No. 2305.

War Service: As above.

Present Occupation: Secretary and Treasurer, Hatcher-Turpin Co., Real Estate, Insurance and Loans.

Address: 523 Mulberry St.; home, 100 Vineville Ave., Macon, Ga.

Howard A. Scholle

SCHOLLE, HOWARD A., Lawyer; born, New York City, Sept. 12, 1885; son of Samuel Scholle and Estelle (Content) Scholle.

Educated: Sachs School, New York City; A.B. 1906, Williams College; M.A. and LL.B. 1912, Columbia University.

Professional: 1907-1909, Smelting business; 1912-1914, Law.

Aeronautical Activities: Officer in Charge of Balloons and Assistant Supply Officer, Army Balloon School, Fort Omaha, 1917; Air Division, Signal Corps, Washington, 1918; Supply Officer, Balloon Detachment, Commanding Officer, 29th Balloon Company, President, Preliminary Aviation Examining Board, Fort Monroe, 1918; Attached to Office Chief of Army Balloon Inspection, 1918-1919, member, Contest Committee, Balloon Committee, Airways and Maps Committee and Library Committee, Aero Club of America.

Flying Rating: Free Balloon Pilot, Certificate No. 675, Aero Club of America.

War Service: 1st Lieut., Air Service, Aug. 1917 to Feb. 1919.

Member: Aero Club of America; Williams Club; University Club (Salt Lake City) etc.

Address: 11 East 76th St., New York City.

Rudolph William Schroeder

SCHROEDER, RUDOLPH WILLIAM, Automotive business; born, Chicago, Ill., Aug. 14, 1885; son of John Schroeder and Anna (Reidy) Schroeder.

Educated: Grammar, High and Normal Schools, also Crane Technical School, all of Chicago, Ill.

Professional: Started in Automobile business in 1900.

Aeronautical Activities: Built gliders 1908 to 1910; Airplane Mechanician to Otto Brodie (Farman), learned to fly under him, 1910-1911; Mechanician to Beachy, Jimmie Ward, Katherine Stinson, Mickey McGuire, Max Lillie, De Loyd Thompson, and others. World's Altitude Record, Sept. 18, 1918, 28,900 ft.; Won first place in the Handicap Event, of the New York-Toronto Race, in Aug. 1919; Two Man World's Altitude Record 33,500 ft., Jan. 13, 1920; One Man Altitude, World's Record 38,180 ft., Feb. 27, 1920; U. S. Air Service Pilot in the Gordon-Bennett, Sept. 1920.

Flying Rating: R. M. A.; Enlisted Aviation Section, Oct. 1916; Chief test pilot, 1918-1920.

War Service: Major, U. S. Air Service, Test Pilot, Air Service Engineering Dept.
Member: Aero Club of America; Aero Club of Illinois; Aero Club of Kansas; Hon. Mem., Chicago Air Board; Adventurers Club; Amer. Soc. Mech. Eng.; American Legion.
Present Occupation: Aviation Engineer, Underwriters Laboratories.
Address: 207 E. Ohio St., Chicago, Ill.; home, 2276 Logan Boulevard, Chicago, Ill.

Harold Belzer Schuck

SCHUCK, HAROLD BELZER, Merchant; born, La Porte City, Iowa, April 25, 1893; son of George H. Schuck and Rebecca A. Schuck.
Educated: Graded schools; high school; University of Minnesota.
Professional: Agricultural interests; grain and commission business; banking interests.
Aeronautical Activities: Trained as 2nd Lieut. Eng. Officer A. S. A., at M. I. T., Feb. to June 1918; trained as Pilot at Call Field, June to Nov. 1918.
Flying Rating: Reserve Military Aviator.
War Service: Mexican Border Service, 1916; World War, Rainbow Division, 151st F. A., Jan. to June 1918.
Present Occupation: Grain merchant.
Address: Girard Station, Crookston, Minn.

Andrew Humbert Scott

SCOTT, ANDREW HUMBERT, Mining Engineer; born, Los Angeles, Calif., July 9, 1887; son of Edward Bowes Scott, M.D. and Mary Scott.
Educated: Lincoln Grammar School, San Francisco; Sacramento High School; Stanford University; University of Nevada.
Professional: 10 yr. practical mining engineer.
Aeronautical Activities: Interested in building airship, 1912; commissioned 1st Lieut. San Corps, Nov. 28, 1918; Emerson Field, S. C. Dec. 1918; Bolling Field, March 1919; present rating, Captain A.S.R.C.
Flying Rating: Aerial Observer and Pilot.
Books: Loss of Efficiency in Air Wash; Improved Wing Structure.
Member: Aero Club of America; Geological Society; American Chemical Society; American Association of Engineers; American Society for the Advancement of Science; Seismological Society of America; Meteorological Society; Army Ordnance Association.
Present Occupation: Mining Engineer.
Address: Box 777, Lovelock, Nev.



Rudolph W. Schroeder

Paul Plunket Scott

SCOTT, PAUL PLUNKET, Aviator; born, Augusta, Ga., Sept. 5, 1894; son of Robert Albert Scott and Nancy (Dunlap) Scott.
Educated: 1912, Tattnall Collegiate Institute, Claxton, Ga.; 1913-1914, Presbyterian College of South Carolina, Clinton, S. C.
Professional: 1914-1917, Traveling Freight Claim Adjuster, International and Great Northern R. R., Houston, Tex.
Aeronautical Activities: Enlisted Fort Myer, Va., Aug. 1917; U. S. School of Military Aeronautics, Princeton, Nov. 1917; France, Dec. 1917 to Nov. 1918 at St. Maxient, Avord and Issoudun.
Flying Rating: Reserve Military Aviator, July 1918; French Brevet, July 1918.
Present Occupation: Pilot, U. S. Air Mail, June 1920 to date.
Address: Commercial Club, Salt Lake City, Utah; home, 1641 R. Street, N. W., Washington, D. C.

Hugh Sears

SEARS, HUGH, Theatrical Manager; born, Vauceboro, Me., June 5, 1890; son of Andrew J. Sears and Elizabeth (Mac Donald) Sears.
Educated: High school, Danforth, Me.
Professional: Seven years with Underwriters Salvage Co. of N. Y.
Aeronautical Activities: School of Military Aeronautics, Princeton, N. J., 1917; flying training at Kelly Field, Carlstrom Field, and Ellington Field.
Flying Rating: Reserve Military Aviator.
Member: Aero Club of America.
Present Occupation: Theatrical Manager.
Address: 11 Old Broadway, New York, N. Y.

Lyman J. Seely

SEELY, LYMAN J., Manufacturer; born, Detroit, Mich., Nov. 4, 1877; son of James M. Seely and Mary E. (Tremaine) Seely; married, Marguerite Woodworth, Sept. 29, 1906.
Educated: Public schools of Rochester, N. Y.; Dulwich preparatory school, London, England; University of Rochester.
Professional: Took up newspaper work in 1902; became interested in Elbridge Engine Co., Rochester, N. Y. in 1907; President and proprietor of Elbridge Engine Co. until 1913; joined G. H. Curtiss as sales and publicity manager, Curtiss Aeroplane and Motor Companies, until 1917; purchased Hammond sport plant in 1919 and organized Keuka Industries, Inc.
Present Occupation: President of Keuka Industries, Inc. and of Steuben News, Inc.
Address: Lake Street, Hammondport, N. Y.

Clarence Edward Shankle

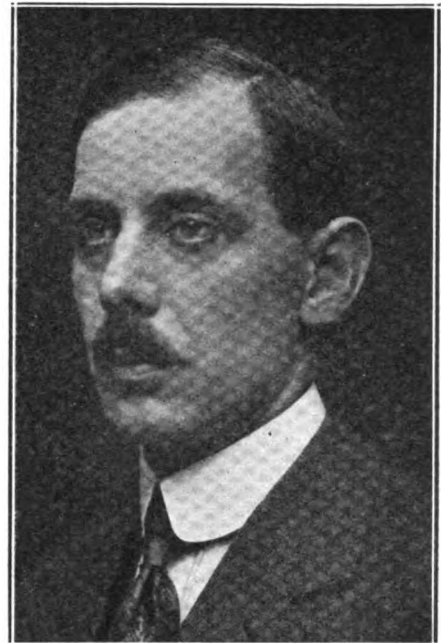
SHANKLE, CLARENCE EDWARD, 1st Lieut., Air Service; born, Newark, Tex., Oct. 13, 1898; son of J. D. Shankle and Lula Shankle; married, Norma Katherine Smith, Jan. 6, 1920.
Educated: High school; 1914, North Texas State Normal College.
Aeronautical Activities: Flying cadet, Wilbur Wright Field, 1917; flying cadet, Ellington Field, 1917-1918; Student Officer of Pursuit Training at Carlstrom and Dorr Fields; Flying Instructor at Ellington Field to June 1919; with the 20th Squadron, Kelly Field from Sept. 1920 to Nov. 1921; 14th Squadron, Langley Field to date.
Flying Rating: Reserve Military Aviator, March 1918; Airplane Pilot.
Present Occupation: 1st Lieut., Air Service.
Address: Langley Field, Va.; home, Memphis, Tex.

Leon Edgar Sharon

SHARON, LEON EDGAR, 1st Lieut., Air Service; born, Hoopston, Ill., April 13, 1890; son of Wm. J. Sharon and Hattie May Sharon; married, Ruth Gill, Nov. 22, 1919.
Educated: Public and high schools of Hoopston, Ill.
Professional: Public Accountant, 1909-1917.
Aeronautical Activities: Began flying at Ellington Field, March 15, 1918; from 1918 to date, officer in the Air Service.
Flying Rating: Reserve Military Aviator, Aug. 1, 1918; Airplane Pilot, Jan. 1920.
War Service: Enlisted A.S.S.C., April 12, 1917; flying cadet from Nov. 3, 1917 to Aug. 1, 1918; 2nd Lieut., Air Service, Aug. 1, 1918 to July 1, 1920; 1st Lieut., Air Service, July 1, 1920 to date.
Present Occupation: 1st Lieut., Air Service.
Address: Kelly Field, San Antonio, Tex.

B. Russell Shaw

SHAW, B. RUSSELL, Consulting Aeronautical Engineer; born, Coshocton, Ohio, Oct. 13, 1890; son of Benjamin L. Shaw and Mary J. (Kearns) Shaw; married, Alma E. Young, Oct. 2, 1920.
Educated: Public schools, Coshocton, Ohio and Zanesville, Ohio high schools, Newark Ohio and Indianapolis, Ind.; M.E., Marquette University.



Lyman J. Seely

Aeronautical Activities: Aeroplane constructor, 1908-1909; taught self to fly, 1910; exhibition aviator, 1910-1913; designed and constructed eight different machines, 1909-1916; constructed and flew one of the earliest commercial flying boats, 1913; redesigned and built first copy of Morane-Saulnier monoplane in America, 1913-1914; redesigned and produced the first large Voisin type machine in America, 1915; Wright Bros. Co. 1916-1917, as draughtsman and later in charge of Engineering Department; transferred to New York as Assistant Designing Engineer for the Wright-Martin Aircraft Corp., supervised the completion of Franco-British Flying Boat with which Caleb Bragg won the Aero Club Cup in 1917; Consulting Engineer, Lawson Aircraft Corp., 1917-1918; opened consulting offices in New York City, 1919; Consulting Engineer, Lawson Airplane Co. 1920-1921; Consulting Engineer to representatives of Imperial Japanese Navy; inventor and manufacturer of the Vertimeter; General Manager of the Aeronautical Instrument Co.
Member: Aero Club of Indianapolis; Society of Automotive Engineers.
Present Occupation: Consulting Aeronautical Engineer.
Address: 30 East 23rd St., New York City.

Charles Leonard Shaw

SHAW, CHARLES LEONARD, Advertising; born, Ossipee, N. H., Sept. 4, 1896; son of Charles Jefferson Shaw and Ellen (Birtwhistle) Shaw.
Educated: Public schools of Orono, Me. and Malden, Mass.; Wentworth Institute, Boston, Mass.
Professional: 1916, Norton Company, Worcester, Mass.
Aeronautical Activities: U. S. S. M. A., Princeton University, 1918; training at Camp Dick, Taylor Field and Kelly Field.
Flying Rating: Reserve Military Aviator.
Member: Aero Club of Massachusetts.
Present Occupation: Assistant Publicity Manager, Norton Co.
Address: 1 New Bond St., Worcester, Mass.

George Walter Shaw

SHAW, GEORGE WALTER, Wholesaler; born, Attleboro, Mass., March 3, 1893; son of Gorham C. Shaw and Ada M. Shaw; married, Hazel G. Hallet, Sept. 8, 1920.
Educated: Caribou High School, Caribou, Me.; 1915, New England Conservatory of Music.
Professional: Taught Piano, 1915-1917; 1919-1921, commercial aviation.
Aeronautical Activities: Organized first flying circus in U. S. with Eddie Stinson; fourth student pilot at Curtiss Flying School, Buffalo, N. Y., 1917; graduated as pilot under Carlstrom at Newport News, Va., July 1917; commissioned Ensign and Naval Aviator in Nov. 1917; served with U. S. Naval Aviation Forces overseas until Feb. 1919; still a member of U. S. Naval Reserve Flying Corps; Shaw Flyers, 1919-1920.
Flying Rating: Lieut., (j.g.) U.S.N.R.F.; Naval Aviator No. 171; Aero Club of America license No. 791.
War Service: As above.

War Honors: Awarded Navy Cross and citation, Nov. 11, 1920.
Member: Aero Club of America; Amer. Legion.
Present Occupation: Shaw & Shaw.
Address: South Main St., Caribou, Me.

Harold Eden Shaw

SHAW, HAROLD EDEN, Manufacturing; born, Ashaway, R. I., April 3, 1893; son of Alvin Eden Shaw and Amy L. (Babcock) Shaw.
Education: Public schools of Ashaway, R. I. and Monson, Mass.; Monson Academy; B. A. 1914, Amherst College.
Professional: 1914 to 1921 with Holliston Mills.
Aeronautical Activities: Training at Camp Dick, Wilbur Wright Field, Chanute Field, and Brooks Field.
Flying Rating: Reserve Military Aviator.
War Service: Nov. 1917 to Jan. 1919.
Member: Aero Club of America.
Present Occupation: Sales Executive, Holliston Mills.
Address: Norwood, Mass.

Howard Sheaff

SHEAFF, HOWARD, Engineer; born, Beacon, N. Y., April 24, 1899; son of Edmund H. Sheaff and Alice C. Sheaff.
Education: Stuyvesant High School, New York City; Wesleyan University, Middletown, Conn.
Professional: Assistant to W. H. Barling; with Wittenmann Aircraft Co., 1920 to date.
Member: Aero Club of America.
Present Occupation: Wittenmann Aircraft Co.
Address: 1440 Broadway, New York City.

Lester Evans Shealy

SHEALY, LESTER EVANS, Commercial Aviator; born, Little Mountain, S. C., Dec. 1, 1895; son of James E. Shealy and Elvie E. (Meets) Shealy; married, Lee Ola Sutton, March 18, 1920.
Education: Public and high schools of Little Mountain, S. C.
Aeronautical Activities: U. S. Naval Air Forces, May 1917, Pensacola, Fla.; Squadron Engineer Officer for 15 months; flew seaplanes, boats and land planes.
Flying Rating: Naval Aviator.
War Service: U. S. Naval Air Service, May 1917 to Sept. 1919.
Member: Aero Club of America.
Present Occupation: Commercial airplane pilot and owner.
Address: North State Aircraft Co.; home 908 W. 5th St., Charlotte, N. C.

Hiram Wilson Sheridan

SHERIDAN, HIRAM WILSON, 1st Lieut., Air Service; born, Leavenworth, Kans., May 26, 1897; son of Hiram Wilson Sheridan and Martha Jane Sheridan.
Education: High schools of Topeka, Kans., Sacramento, Calif., New Orleans, La.; Wilson's Business College, Seattle, Wash.
Professional: Position with railroad company, 1918-1915; 1915-1917, in Alaska, prospecting, Secretary to Supt., Kennecott Mines.
Aeronautical Activities: Enlisted in Aviation Section, April 14, 1917 at Spokane, Wash.; Gerstner Field, Jan. to June 1918; commissioned, June 17, 1918; Carlstrom Field, pursuit and gunnery course; June 1920 to May 1921, Operations Officer of 1st Pursuit Group, Kelly Field.
Flying Rating: Reserve Military Aviator, June 12, 1918.
Present Occupation: Pilot and Armament Officer, 1st Provisional Pursuit Group, Langley Field, Va.
Address: 162 West Center Street, Logan, Utah.

William Carrington Sherman

SHERMAN, WILLIAM CARRINGTON, Major, Air Service; born, Augusta, Ga., May 5, 1888; son of Albert G. Sherman and Annie Lee (Hood) Sherman.
Education: Richmond Academy; University of Georgia; U. S. Military Academy.
Professional: Graduated U. S. M. A. 1910; Army Officer to present time.
Aeronautical Activities: Learned to fly Wright plane, 1912, received pilot's license June 1912; detailed in flying Oct. 1912 to Oct. 1913; Chief of Staff, 1st Army Air Service Oct. 1918; Chief of Air Service Training, March 1919-June 1920; Asst. Chief Training and Operations Group, June 1920 to present date.
Flying Rating: Junior Military Aviator, April 1920; Airplane Pilot.
War Service: A. E. F. 1st Div. June 1917 to July 1918 as A. D. C. to Commanding General and Asst. Chief of Staff; 3d Corps from July 1918 to Oct. 1918 as Asst. Chief of Staff; Chief of Staff, 1st Army Air Service, Oct. 1918 to end of war.
Member: Aero Club (N. Y.); Army and Navy Club (Wash.); Chevy Chase (Wash.).
Present Occupation: Field Officer's School, Langley Field, Va.

Address: Air Service, Washington, D. C.; home, Augusta, Ga.

Horace Moore Sherwood

SHERWOOD, HORACE MOORE, Agriculturist; born, Allegan, Mich., March 25, 1894; son of Mayhew Sherwood and Winona (Moore) Sherwood.
Education: Public schools of Allegan, Mich.; Phillips Exeter Academy; University of Michigan.
Professional: Grower, buyer, distributor, winter vegetables.
Aeronautical Activities: 1917-1919 Air Service Ground and Flying Schools; Gosport Instructor.
Flying Rating: Reserve Military Aviator; pilots license.
War Service: Air Service, Army, Dec. 1917 to June 1919.
Present Occupation: Agriculturist.
Address: Box 483, Fort Myers, Fla.

George Howell Shields, Jr.

SHIELDS, GEORGE HOWELL, JR., Oil Business; born, Hannibal, Mo., March 27, 1869; son of George H. Shields, Sr. and Mary Harrison (Leighton) Shields; married, Florence M. Street, June 5, 1907.
Education: Smith Academy, St. Louis, Mo.; A. B. 1891, A. M. 1893, Princeton University; LL. B. 1893, LL. M. 1893, George Washington University.
Professional: Practiced law, 1893 to 1898; U. S. Army, 1898 to 1909; Jobber and Specialist in Lubricating Oils, 1909 to date.
Aeronautical Activities: Assistant Executive, D. M. A., Washington, D. C., 1918; Army Balloon Schools, Omaha, Nebr. and Arcadia, Calif., 1918.
War Service: 2nd Lieutenant, 1st Lieutenant and Captain, U. S. Infantry, 1898-1909; Major, A. G. O. and Lt. Col., Air Service, 1918.
Member: Army and Navy Club (Wash.).
Present Occupation: Vice President, J. D. Street & Co., Inc.
Address: 4055 Park Ave.; home, 6409 Wydown Blvd., St. Louis, Mo.

Eric K. Shilling

SHILLING, ERIC K., Organist; born, Benning, D. C., July 6, 1889; son of George Shilling and Jennine (Ericson) Shilling; married, Louise Brandon, June 15, 1913.
Education: Benning public schools.
Professional: Student of music in U. S. and Denmark, 1900-1911; 1914-1915, court reporter; 1916-1917, customs inspector.
Aeronautical Activities: U. S. S. M. A., Princeton University, 1918; training at Ellington Field, 1919.
Flying Rating: Reserve Military Aviator.
Present Occupation: Organist.
Address: High St., Charlottesville, Va.

Raymond C. Shrader

SHRADER, RAYMOND C., Stationer; born, Osceola, Nebr., April 6, 1896; son of William M. Shrader and Cornelia M. Shrader.
Education: Osceola High School.
Professional: Bank Teller and Bookkeeper, 1915; Railroad Clerk, 1916 to May 1917.
Aeronautical Activities: S. M. A. at University of Illinois, 1918; Cadet at Kelly Field, June to Nov. 1918; commissioned Nov. 1918 and discharged in reserve, Dec. 1918.
Flying Rating: Reserve Military Aviator.
War Service: May 1917 to Dec. 1918, U. S. Army.
Present Occupation: Stationer.
Address: 145 No. Harrison St.; home, Elks Club, Pocatello, Idaho.

Peter Emanuel Skanse

SKANSE, PETER EMANUEL, 1st Lieut., Air Service; born, Seattle, Wash., May 13, 1893; son of Peter Skanse and Mia Skanse.
Education: Washington Grammar School, Minneapolis, Minn.; Minneapolis South High School; University of Minnesota; Law School, University of Minnesota.
Aeronautical Activities: Enlisted, S. E. R. C., A. S. at Officers Training Camp, Ft. Snelling, Minn., Aug. 15, 1917; graduated from Ground School, University of Texas, Feb. 9, 1918; flying training at Kelly Field and Eberts Field; flying instructor at Eberts Field, May 16, 1918 to Oct. 12, 1918; flying instructor at Kelly Field, March 1919 to Sept. 1919; Mexican Border Patrol with 8th Aero Squadron at McAllen, Tex., Nov. 1919 to March 1920; Mexican Border Patrol and Squadron Engineer Officer, July 1920 to April 1921; attached to 1st Surveillance Squadron at Langley Field, May 1921 to date.
Flying Rating: Reserve Military Aviator, May 13, 1918; Airplane Pilot.
War Service: May 12, 1917 to date.
Present Occupation: 1st Lieut., Air Service.
Address: 1130 South Seventh Street, Minneapolis, Minn.

Joseph Pierpont Skrdlant

SKRDLANT, JOSEPH PIERPONT, Aerial Transportation; born, Philadelphia, Pa., May 24, 1896; son of Prokop Skrdlant and Mary (Pokorny) Skrdlant.
Education: Jefferson Grammar School; N. E. High School, Philadelphia; Williamson School, Pennsylvania.
Aeronautical Activities: Toronto University; Armour Heights, Leaside, Canada; Camp Hicks, Texas, 1917-1918; commissioned, Jan. 1918; trained on combat machines at Cirencester, England; instruction in wireless telephony at Oxford University; aerial combat and aerial gunnery at Marse-on-the-sea; joined the 62nd Squadron, R. A. F., Bristol Fighters, with which unit saw service in France, Belgium, and Germany; co-organizer of Aerial Navigation and Engineering Co.
Flying Rating: Flight Lieutenant, Royal Air Force.
War Service: Sept. 1917 to Jan. 1920.
Present Occupation: Vice President and General Manager of Aerial Navigation Co.
Address: Foster Bldg., Denver, Colo.; home, 4046 N. Sixth St., Philadelphia, Pa.

Harold Olcott Sloan

SLOAN, HAROLD OLCOTT, Importer; born, Brooklyn, N. Y., June 22, 1894; son of Francis Henry Sloan and Jessie (Vanderloef) Sloan; married, Elsa W. Schmidt, July 11, 1918.
Education: Pawling School, Pawling, N. Y.
Professional: In the rubber business until the beginning of the war; since the war, Vice President and Treasurer of Gomez & Sloan, Inc., Importers.
Aeronautical Activities: Ground School at Cornell, graduated Dec. 1917; training at Gerstner Field; commissioned May 1918; Instructor in advanced acrobatics at Gerstner Field; Instructor in Aerial Gunnery and Combat at Rockwell Field.
Flying Rating: Reserve Military Aviator.
War Service: Enlisted at Plattsburg Barracks and discharged at Rockwell Field, Jan. 1919.
Present Occupation: Importer, Vice President and Treasurer, Gomez & Sloan, Inc.
Address: 244 Water St., New York City; home, 11 Larchmont Court, Larchmont, N. Y.

William Eyres Sloan, Jr.

SLOAN, WILLIAM EYRES, JR., Plumbing Supplies; born, Rochester, N. Y., May 30, 1898; son of William Eyres Sloan, Sr. and Emily Louise (Harris) Sloan.
Education: Phillips Academy; 1919, Princeton University.
Aeronautical Activities: Ground School, M. I. T.; training at Bayshore, L. I., Pensacola, Fla. and Hampton Roads, Va., June 1918 to Jan. 1919.
Flying Rating: Ensign, Naval Aviator No. 1043, Aug. 1918.
War Service: Navy, May 1917 to Jan. 1919.
Present Occupation: Wholesale Plumbing and Heating Supplies.
Address: 67 Exchange St.; home, 1250 East Ave., Rochester, N. Y.

Chandler Smith

SMITH, CHANDLER, Broker; born, New York City, Jan. 6, 1867; son of Chandler Smith and Mary Elizabeth (Burbeck) Smith; married, Alla Halcyone Doughty, Jan. 3, 1900.
Education: Public schools of New York.
Professional: Stock Broker.
Aeronautical Activities: Graduated, Adjutants' School of Military Aeronautics, Ohio State University, March 23, 1918; Scott Field, in command 262nd Aero Squadron; Officer in Charge, School for Ground Officers; Wing Commander, Survey officer, Summary Court officer, Valparaiso, Ind.; Captain, Company B, Military Training Camp, Valparaiso University, 1918-1919; Captain AS-ORC; in command 31st Airdrome Company G. H. Q. Air Service; Adjutant Military Order of the World War.
Member: Aero Club of America; Army and Navy Club.
Present Occupation: Broker; Capt. AS-ORC, C. O. 31 Airdrome Co.
Address: 41 E. 42d St.; home, Staten Island, New York.

Claude Hamilton Smith

SMITH, CLAUDE HAMILTON, Paper Manufacturer; born, Holyoke, Mass., Dec. 4, 1894; son of George H. Smith and Ethelyn J. (Hamilton) Smith.
Education: Highland Grammar and High School of Holyoke, Mass.; Williston Seminary, 1912-1913; 1915-1916, University of Michigan; 1916-1917, Colorado School of Mines.
Professional: Paper manufacturing.
Aeronautical Activities: Airplane mechanic, Rockwell Field; Ground School, Berkeley, Calif.; flying training for six months at Mather and March Fields.
Flying Rating: Reserve Military Aviator.
War Service: June 1917 to March 1919.

Member: Aero Club of Massachusetts.
Present Occupation: Paper manufacturer.
Address: Crocker McElwain Co.; home, Phoenix Chambers, Holyoke, Mass.

Dean C. Smith

SMITH, DEAN C., Air Mail Pilot; born, Cove, Ore., Sept. 27, 1899; son of J. Cull Smith and Rhoda B. Smith.
Education: Public schools of Oregon; two years in college.
Aeronautical Activities: Enlisted, A.S.S.C., July 1917; Gosport Instructor's School, Aug. 1918; instructor till Jan. 1919; Pursuit School, Rockwell Field, March 1919; Air Mail Pilot, 1920 to present date.
Flying Rating: Reserve Military Aviator, July 3, 1918.
War Service: July 1917 to April 1919.
Member: Aero Club of America; Air Mail Pilots Association.
Present Occupation: Air Mail Pilot.
Address: Air Mail Field; home, 2217 Howard St., Omaha, Nebr.

Howard Douglas Smith

SMITH, HOWARD DOUGLAS, Student; born, Council Bluffs, Iowa, Feb. 13, 1897; son of Alex Marquardt (Step-Father) and Ella Marquardt.
Education: Marshalltown public schools; University of Kansas.
Aeronautical Activities: Aerial Observer, Post Field, Fort Sill, Okla., Dec. 6, 1918 to Feb. 11, 1919; primary pilot's school, Park Field, Tenn., Feb. 11 to March 15, 1919; pursuit school, Carlstrom Field, Fla., March 15, 1919 to May 14, 1919; flying time while in the service, 250 hr.
Flying Rating: Reserve Military Aviator and Airplane Observer.
War Service: U. S. Air Service, Feb. 12, 1918 to May 14, 1919; school of military aeronautics, Austin, Tex.; school of fire for field artillery, Fort Sill, Okla.; school of aerial observation, Post Field, Fort Sill, Okla.; primary school for pilots, Park Field, Memphis, Tenn.; pursuit school, Carlstrom Field, Arcadia, Fla.
Member: Allied Fliers Club, Oakland, Calif.
Present Occupation: Student.
Address: 350 North Green St., Wichita, Kans.

Harry G. Smith

SMITH, HARRY G., Pilot; born, Diagonal, Iowa, Dec. 8, 1890; son of Rev. W. C. Smith and Mary (Williams) Smith; married, Hazel Veatch, April 1, 1921.
Education: Indianola High School, Iowa; Mech. Eng. at Iowa State College; A. B. 1917, Simpson College.
Professional: Taught Milford High School, Jan. 13, 1919 to June 1920, Physics, Manual Training, and Athletics.
Aeronautical Activities: Call Field; Served as Flying Instructor 9 months, at Barron Field, test pilot and officer in charge of assembly; Commissioned 2nd Lieut.; general manager and pilot for Milford Aero Club, summer of 1919; pilot for flying boat on Lake Okaboji (Iowa), 1920; accepted in Air Mail service, Aug. 30, 1920; assigned as regular pilot on Omaha-Salt Lake Division, Oct. 3, 1921; from Sept. to Oct. 3, 1920, acted as reserve pilot at Omaha.
Flying Rating: Reserve Military Aviator, March 10, 1918.
Present Occupation: Pilot, Air Mail Service.
Address: Air Mail Field, Cheyenne, Wyo.; home, Dedham, Iowa.

Henry Lilly Smith

SMITH, HENRY LILLY, Cotton Business; born, Concord, N. C., Jan. 1, 1887; son of Thomas W. Smith and Mary H. Smith.
Education: Public schools of Concord, N. C.; Trinity Park High School; 1909, Trinity College.
Aeronautical Activities: S.M.A., University of Texas; training at Taylor and Carlstrom Fields 1919.
Flying Rating: Reserve Military Aviator.
Present Occupation: Cotton Business.
Address: P. O. Box 552, Kannapolis, N. C.; home, 31 Marsh St., Concord, N. C.

Hugh Neely Smith, Jr.

SMITH, HUGH NEELY, JR., Broker; born, Griffin, Ga., April 12, 1892; son of Hugh Neely Smith, Sr. and Pearl D. Smith; married, Anne W. Smith, July 25, 1918.
Education: Public schools and college.
Professional: Cotton broker and exporter.
Aeronautical Activities: Feb. 1918, assigned to Air Service for duty.
Flying Rating: Reserve Military Aviator, 1918.
War Service: Commissioned 1st Lieut., Infantry, Nov. 1917; discharged as Captain, Air Service, May 1919.
Present Occupation: Cotton broker and exporter.
Address: Box 238, Chickasha, Okla.

James Floyd Smith

SMITH, JAMES FLOYD, Aeronautical Expert; born, Geneseo, Ill., Oct. 17, 1884, son of John F. Smith and Kate J. Smith; married, Hilder F. Youngberg, May 11, 1907.
Education: Public schools, Union, Ore. and San Diego, Calif.
Professional: 1906-1910, theatrical; 1912-1922, aeronautical.
Aeronautical Activities: Built and flew tractor biplane 1912; continuous flying and inventions from 1912 to date.
Flying Rating: Aero Club America Aviator's License No. 207.
Present Occupation: Manufacturing life packs.
Address: 4052½ Sheridan Road, Chicago, Ill.

Paul Linwood Smith

SMITH, PAUL LINWOOD, Newspaper Reporter; born, New York City, June 29, 1897; son of George R. Smith, M.D. and Mabel (Paul) Smith.
Education: Grammar and high schools, Woonsocket, R. I.; University of Vermont.
Aeronautical Activities: Princeton S.M.A.; Camp Dick; Carruthers Field.
Flying Rating: Reserve Military Aviator.
Present Occupation: Reporter on "Woonsocket Call".
Address: 75 Main Street; home, Greenville Road, Woonsocket, R. I.

Ronald John Smith

SMITH, RONALD JOHN, Commercial Pilot; born, Bournemouth Hants, England, Nov. 21, 1894; son of John James Smith and Ada Smith; married, Ada Noyes.
Education: Various English public schools.
Aeronautical Activities: Transferred from Royal Canadian Horse Artillery to R.F.C., 1917; primary training, Doncaster and Scampton, England; advanced training, Twinberg and Lire, Scotland; posted to No. 23 Squadron R.F.C.; shot down March 28, 1918; on recovery was sent to Vendome, France, as instructor; Instructor at Northolt, England, after armistice; Manager and Asst. Sec. of National Aircraft Underwriters Association; Manager, Cardinal Aero Service Inc.
Flying Rating: Flying Officer, R.A.F.
War Service: Feb. 1915 to Nov. 11, 1918.
Member: British Great War Veterans of America.
Present Occupation: In charge of Flying Operations, Cardinal Air Service.
Address: 328 West 113 Street, New York City.

Raymond DeMott Smith

SMITH, RAYMOND DEMOTT, Student; born, Cleveland, Ohio, June 7, 1897; son of Alfred E. Smith and Gertrude Smith.
Education: Dunham Grammar School; East High School, Cleveland, Ohio; B.S. 1921, University of Michigan.
Aeronautical Activities: Ground School, University of Illinois, Aug. 1917; sent to Call, Love, and Ellington Fields for training.
Flying Rating: Reserve Military Aviator, June 1919.
War Service: Air Service, U. S. Army, Aug. 1918 to June 1919.
Member: Aero Club, University of Michigan.
Present Occupation: Student.
Address: 604 S. State St., Ann Harbor, Mich.; home, 1836 E. 87th St., Cleveland, Ohio.

Stanton Thomas Smith

SMITH, STANTON THOMAS, 1st Lieut., Air Service; born, Independence, Mo., Aug. 30, 1894; son of Thomas Newton Smith and Mattie (Furnish) Smith; married, Maria Spencer, Dec. 22, 1914.
Education: High school, San Antonio, Tex.
Professional: Salesman from May 1912 to Sept. 1917.
Aeronautical Activities: Started flying training, April 3, 1918; commissioned 2nd Lieut., Air Service, Sept. 12, 1918.
Flying Rating: Airplane Pilot, 1918.
Present Occupation: 1st Lieut., Air Service.
Address: Home, Commonwealth Bank & Trust Co., San Antonio, Tex.

William Conwell Smith

SMITH, WILLIAM CONWELL, Attorney at Law; born, Baltimore, Md., Jan. 15, 1887; son of B. Holly Smith, M.D.D.D.S. and Francis Gist (Hopkins) Smith.
Education: 1903, Tome School for Boys; A.B. 1906, Johns Hopkins University; LL.B. 1908, University of Maryland.
Professional: Admitted to Bar in 1908. In general practice in Maryland and District of Columbia since that time.

Aeronautical Activities: Training at Canute Field and Post Field, 1918-1919.
Flying Rating: Reserve Military Aviator, Nov. 1918.
Member: American Flying Club of Baltimore.
Present Occupation: Attorney at Law.
Address: 709 Calvert Bldg.; home, 1007 Madison Ave., Baltimore, Md.

Walter Joseph Smith

SMITH, WALTER JOSEPH, Air Mail Pilot; born, Huron, S. D., April 9, 1893; son of Horace G. Smith and Fannie (Howe) Smith; married, Zita Walsh, Feb. 16, 1920.
Education: Public schools of Pierre, S. D.; Banking and Accounting, and Law school.
Professional: Cashier, C. & N. W. Railroad to Aug. 1916.
Aeronautical Activities: Princeton School of Military Aeronautics; Cadet overseas, trained at Avord, France also Tours and Issoudun; assigned to 24th Aero Squadron, A.E.F. at the front, Aug. 1918 to Armistice.
Flying Rating: French Brevet No. 11889, March 6, 1918.
War Service: 24th Aero Squadron, Aug. to Nov. 1918, Meuse-Argonne Offensive.
Honors: Credited with destruction in combat of one enemy plane.
Member: U. S. Air Mail Pilots of America; American Legion.
Present Occupation: Pilot, U. S. Air Mail Service.
Address: 307 N. Oak Park Ave.; Oak Park, Ill.; home, Pleasant Drive, Pierce, S. D.

Wesley Leland Smith

SMITH, WESLEY LELAND, Pilot, U. S. Air Mail Service; born, Los Banos, Calif., Jan. 9, 1896; son of Oscar E. Smith and Amy D. Smith.
Education: Grammar and High Schools in State of California; Bach. of Science, College of Electrical Engineering, University of Calif., 1915.
Professional: Public School Teacher, State of Calif. 1916-Nov. 1917; School Teacher and Military Drill Master, Riverdale Country School, Riverdale-on-Hudson, N. Y., Jan. to May 1919.
Aeronautical Activities: Helped build Flying Boat in shops at University of California in 1914; Flying Cadet, School of Military Aeronautics, Berkeley, Calif., Jan. 16 to March 25, 1918; Flying Cadet, Rockwell Field, San Diego, Calif., March 28 to May 22, 1918; Machine gun instructor, Camp Dick, Dallas, Tex., June 1 to July 28, 1918; flying instructor, Payne Field, West Point, Miss., Aug. 1 to Oct. 15, 1918; exhibition flights and passenger flights, Boston, Mass. and Hartford, Conn., June to Oct. 1919; Pilot, U. S. Air Mail Service, N. Y.—Wash. Route, Nov. 11, 1919—May 15, 1920; N. Y.—Cleveland Route, May 15, 1920—to date; only man living who has made a N. Y.—Cleveland round trip in one day; Dec. 3, 1920, flew Cleveland to Mineola in DH4a with mail, 423 miles in 2 hr. 48 min., average speed 151 m.p.h., (record) Dec. 28, 1920; fifth in seniority among mail pilots.
Flying Rating: Reserve Military Aviator, U. S. Army, May 22, 1918; Airplane Pilot, F. A. I. Aero Club of America License No. 2539, Oct. 23, 1918.
War Service: U. S. Army, Nov. 2, 1917 to Dec. 27, 1918; Commissioned 2nd Lt., R.M.A. U. S. Air Service, May 22, 1918.
Member: Aero Club of America.
Present Occupation: Pilot, U. S. Air Mail Service.
Address: Hazlehurst Field, Hempstead, L. I.; home, 11 East 38th St., New York.

Charles Frederick Smyth

SMYTH, CHARLES FREDERICK, Aeronautical Industry; born, Wichita, Kans., April 7, 1887; son of Charles Henry Smyth and Anna Marie Smyth; married, Margaret Clay Sluss, June 3, 1911.
Education: Wichita Grammar and High Schools; Georgetown University, Washington, D. C.; Scholastic Grad. 1905; 1909, Leland Stanford University.
Professional: Owned and managed Chas. F. Smyth Co., distributor of motor cars in 1910-1911; Sales Manager, Scanland Mfg. Corp., 1912-1913; General Manager and Treasurer, The Niagara Oxygen Corp., Buffalo, N. Y., 1914-1915 to May 1916; promoter and Managing Director, The Boston Electrolytic Oxygen Corp., 1915-1916; General Manager, The Connecticut Aircraft Corp., 1916 to date.
Aeronautical Activities: Assumed general management, The Connecticut Aircraft Corp., May 1916, building balloons and dirigibles for U. S. Government; built Navy's first dirigible balloon DN1, 1916; built and flew Signal Corps observation balloons, 1916-1917; built and conducted trials of three of Navy's first Blimp dirigibles, 1917-1918; invented and holds patent for three lobe observation balloon.
Member: Aero Club, New York; New Haven Country Club.

Present Occupation: General Manager, The Connecticut Aircraft Corp.
Address: 117 Court St.; home, 42 College St., New Haven, Conn.

Albert Lee Sneed

SNEED, ALBERT LEE, Major, Air Service; born, Conway, Arkansas, April 24, 1884; son of Charles Robert Sneed and Vena (Lee) Sneed.
Educated: Public Schools, Conway and Bortonsville, Arkansas; 1½ years, University of Arkansas; U. S. Military Academy, 1904 to 1908.

Aeronautical Activities: C. O., U. S. S. M. A., Mass. Inst. Tech., Oct. 1917 to April 1918; Pilots School, Rockwell Field San Diego, Calif., May 1, 1918 to Aug. 15, 1918; C. O. Love Field, Dallas, Tex., Aug. 1918 to May 1919; O. C. A. S., Washington, D. C. May 1919 to Nov. 1919; Student Engr. Div., Dayton, O., Nov. 1919 to Oct. 1920; Air Officer 3rd Corps Area, Nov. 1920 to present date.

Flying Rating: Junior Military Aviator; Airplane Pilot.

War Service: Air Service Officer, 1917-1918.
Member: Army and Navy Club (Wash.); Baltimore Country Club; American Flying Club of Baltimore.

Present Occupation: U. S. Army Officer, Air Service.

Address: Ft. Howard, Md., Baltimore, Md.; home, Baltimore Country Club, Baltimore, Md.

Neta M. Snook

SNOOK, NETA M., Pilot Instructress; born, Mt. Carroll, Ill., Feb. 14, 1896; daughter of Win. Floyd Snook and Adelle May Snook.

Educated: Mt. Carroll public schools; Francis Shimer School; Iowa State College; University of Iowa; Elmira Academy, Elmira, N. Y.

Aeronautical Activities: Began flying June 1917; Aviation Schools at Newport News, Va. and Miami, Fla., 1917-1918; British Air Ministry, July 1918 to Jan. 1919; exhibition flying, 1920; operated Rinner Airport in Los Angeles, Calif., 8 months to March 1921; wing expert with Davis Douglas Co. to date.

Flying Rating: License for flying civilian aircraft, July 1919; Aero Club of America license, Oct. 1920.

War Service: British Air Ministry, July 1918 Jan. 1919.

Member: Aero Club of America; Aero Club of Southern California; Aero Club of Iowa.

Present Occupation: Pilot instructress.
Address: Goodyear Field, Los Angeles, Calif.; home, 518 W. Belgrave Ave., Huntington Park, Calif.

Lorenzo Lamont Snow

SNOW, LORENZO LAMONT, Captain, Air Service; born, Brigham City, Utah, Aug. 26, 1885; son of Lorenzo Snow and Minnie (Jensen) Snow.

Educated: Washington and Lowell Schools, Salt Lake City, Utah; L.D.S. University, 1904; 1908, University of Utah.

Professional: Studied internal combustion engines in England, France and Germany, 1906-1907; partner in design and manufacture and test of Hansen-Snow Aviation Engine, Pasadena, Calif., 1909-1910; owned and operated cattle ranch in Arizona, 1911-1912; designed and constructed amateur astronomical instruments and continued study of aeronautical power plants, 1913-1915.

Aeronautical Activities: Began flying training July 1916; Instructor in flying, Selfridge Field, 1917; 1st Asst. Eng. Officer, Nov. 1917 to March 1918; Chief Engineer Officer, 1918, Ellington Field; Tech. Liaison Officer, July 1918, Night Bombardment, Base Sec. No. 3, A. E. F.; Chief Eng. Officer, Ford Junction Airdrome, England, Aug. 1918; Commanding Officer, Tangmere Airdrome, Chichester, England, 1918; Chief of Cooling Systems Branch, Power Plant Sec. Engr. Division, Air Service, McCook Field, Jan. 1919 to date (April 1922).

Flying Rating: Reserve Military Aviator, July 1917; Pilot's License, Aero Club of America, No. 4997.

War Service: As above.
Member: Astronomical Society of the Pacific; Dayton City Club; Aero Club of America; Miami Valley Hunt & Polo Club.

Present Occupation: Captain, Air Service; Engineer, Power Plant Sec. Engr. Div.
Address: McCook Field, Dayton, Ohio; home, 141 N. Grand Ave., Pasadena, Calif.

Franklin Frederick Snyder

SNYDER, FRANKLIN FREDERICK, Aviator; born, New York, N. Y., Sept. 22, 1895; son of Franklin Snyder and Martha V. (Schiller) Snyder.

Educated: Public schools and private tutors.

Professional: National advertising.
Aeronautical Activities: Entered aviation school, July 1917; U.S.S.M.A. Cornell; Office A. S. Officer, Eastern Dept.; training at Camp Dick, Dorris Field, Barron Field, Rockwell Field, to Feb. 1919; Pilot for Long Island Aviation Co. and the

American and Canadian Allied Flying Circus, Inc., March 1919 to Aug. 1920; Lieut., New York Aerial Police Reserve, Nov. 1919 to date; Lieut., AS-ORC.

Flying Rating: Reserve Military Aviator; civilian aircraft flying license No. 645; International Pilot Certificate No. 3885.

War Service: Lieut., A. S., U. S. Army.

Member: Aero Club of America.

Present Occupation: Advertising.

Address: 406 West 31 St., New York City; home, 492 3rd St., Brooklyn, N. Y.



Lawrence B. Sperry

William Battencourt Souza

SOUZA, WILLIAM BATTENCOURT, 1st Lieut. Air Service; born, New Bedford, Mass. March 17, 1896; son of William Souza and Mary (Battencourt) Souza.

Educated: Public schools of New Bedford, Mass.
Aeronautical Activities: Cadet, Aug. 1917 to March 1918; 2nd Lieut. Pilot, March 1918 to July 1920; 1st Lieut. Pilot, July 1920 to date.

Flying Rating: Airplane Pilot.

War Service: 1st Officers' training Camp, May 1917 to Aug. 1917; Air Service, Aug. 1917 to Armistice.

Present Occupation: 1st Lieut., Air Service.
Address: Langley Field, Va.; home, 41 Page St., New Bedford, Mass.

Harry Leow Speck

SPECK, HARRY LEOW, 1st Lieut., Air Service; born, Quincy, Ill., July 8, 1892; son of Charles M. Speck and Elva R. Speck.

Educated: Public schools of Quincy, Ill. and Spokane, Wash.; University of Oregon and University of California. (Civil Engineering, three years).

Professional: Engineering and Horticulture from 1914 to 1917.

Aeronautical Activities: Commissioned 2nd Lieut. and transferred to Air Service, 1918; trained at Langley and Taliaferro Fields, 1918-1919; completed bombing course at Kelly Field, May 1921; flew Martin Bombers at Langley Field, June 1921.

Flying Rating: Airplane Observer, 1918; Airplane Pilot, 1919.

War Service: As above.

Present Occupation: 1st Lieut., Air Service.
Address: Langley Field, Va.; home, Medford, Ore.

Earl Winfield Spencer, Jr.

SPENCER, EARL WINFIELD, JR., Lt. Com., U. S. Navy; born, Kingsley, Kans., Sept. 20, 1888; son of Earl W. Spencer and Agnes L. M. (Hughes) Spencer; married, Wallis Warfield, Nov. 8, 1916.

Educated: Grammar and high schools of Evanston, Ill. and Highland Park, Ill.; Racine College; U. S. Naval Academy.

Professional: Past-Midshipman; July 1910, ordered to U.S.S. Nebraska of the Atlantic Fleet; 1914, ordered to Naval Aviation duty; 1915, promoted to Lieutenant; 1918, promoted to Lt. Com.

Aeronautical Activities: Sept. 1914, ordered to factory of Curtiss Aeroplane Co. for instruction in aircraft construction; Nov. 1914, ordered to U. S. Aeronautic Station, Pensacola, Fla. for flying duty; Sept. 1915, flying instructor staff as Senior Flying Instructor; May 1916, detailed as Officer in Charge of Flying Training; May 1917, ordered to Squantum, Mass. as Commanding Officer of U.

S. Naval Air Station at that place; Sept. 1917, ordered to Canada to inspect the posts of the Royal Flying Corps there; Oct. 1917, ordered to San Diego, Calif. as Commanding Officer of U. S. Naval Air Station; Feb. 1920, ordered to March Field for course of flying training in army airplanes and in charge of U. S. Naval Aviation Detachment at that post June 1920, ordered to aviation duty with U. S. Pacific Fleet Air Force on board U.S.S. Aroostook; June to Nov. 1920, in charge Torpedo-plane Squadron, Pacific Fleet Air Force; Nov. 1920, ordered to U. S. Naval Air Station, Pensacola, Fla. for aviation duty; Dec. 1920 to May 1921, on duty at Pensacola as Superintendent, Aviation Training Schools; May 28, 1921 ordered to duty Navy Dept., Washington, D. C.

Flying Rating: Hydro-Airplane Pilot; Expert Aviator; U. S. Navy Air Pilot; Naval Aviator.

War Service: April 1917 to Dec. 1918, U. S. Navy Air Service.

Member: Army and Navy Club (Wash.).

Present Occupation: On duty Navy Dept., Washington.

Address: Navy Dept., Washington, D. C.; home, 109 Wade St., Highland Park, Ill.

Lawrence B. Sperry

SPERRY, LAWRENCE B., Manufacturer; born, Chicago, Ill., Dec. 21, 1893; son of Elmer A. Sperry and Zula (Goodman) Sperry; married, Winifred Allen, Feb. 18, 1918.

Educated: Public Schools; Erasmus Hall.

Professional: Manager Airplane Dept. Sperry Gyroscope Co., 1912-1917; Manufacturer of airplanes and instruments 1917 to present, under firm name of The Lawrence Sperry Aircraft Co. Inc.

Aeronautical Activities: Started by building own plane Fall 1909; flew same 1910 (tractor biplane) in towed flight; 1911, flew plane with 5-cylinder Anzani Motor; 1914, won first prize in French Security Contest; hydroaeroplane duration record, pilot and 1 passenger, 1 hr. 25 min.

Flying Rating: Hydroaeroplane license; Expert license and Naval Aviator license.

War Service: First man to join Naval Flying Corps Class No. 5, Jan. 5, 1917; Naval service ended by crash in experimental aerial torpedo.

Member: Aero Club of America; Garden City Golf Club; Cherry Valley Golf Club; Society of Automotive Engineers.

Present Occupation: Manufacturer
Address: Main Street, Farmingdale, L. I.; home, 1 Garden Place, Hempstead.

Elliott White Springs

SPRINGS, ELLIOTT WHITE, Manufacturer; born, Lancaster, S. C., July 31, 1896; son of Leroy Springs and Grace (White) Springs.

Educated: Asheville School; Culver Military Academy; A. B. 1917, Princeton University.

Professional: Left College to go in Army; went to work in Cotton Mill after discharged in 1919; later, made Secretary and Treasurer of Kershaw Cotton Mills, later promoted to Lancaster Cotton Mills, Lancaster, S. C., 1920.

Aeronautical Activities: Began flying at Princeton in April 1917; flew with American and British at the front; was in New York-Toronto Race in 1919; American Ace, Officially credited with the destruction of 12 enemy airplanes.

Flying Rating: Military Aviator, 1918; received British Pilot Certificate.

War Service: U. S. Air Service 1917-1919; attached R. A. F., 1917-1918; served with 85th Squadron R. A. F. and 148th U. S.; attached R. A. F. as Flight Commander.

War Honors: Distinguished Service Cross; Awarded Distinguished Flying Cross (British); on Aug. 3, 1918, while leading his patrol, which was escorting DH9s to Bruges, this officer shot down in flames one of the three Fokker biplanes which were driving on the DHs and succeeded in driving off the rest of the EA and escorting the bombers safely back to our lines; on the morning of Aug. 22, 1918, he attacked five Fokker biplanes, one of them he shot down which was seen to crash, in a wood south of Velu; he engaged another EA and sent it down out of control, and immediately turned to attack another which he drove East; having shot away all his ammunition, Lieutenant Springs pulled out of the fight; in the afternoon of Aug. 22, he engaged three Fokker biplanes that were diving on a lower flight; one of the three pulled out of his dive; another turned East and the third Lieutenant Springs shot down out of control; it was last seen by one of the patrol diving into the ruins of Bapaume; Lieutenant Springs has been on active service in France since May 22, 1918; he has destroyed five EA and driven out of control two; this in addition to numerous indecisive engagements in which EA have been driven down; this officer has at all times shown the greatest determination and courage and his work as Flight Commander in this Squadron has been marked by a rare combination of cool judgment and most aggressive fighting tactics.

Present Occupation: Cotton Manufacturing.
Address: Lancaster, S. C.

George Owen Squier

SQUIER, GEO. OWEN, Major General, Chief Signal Officer, U. S. Army; born, Dryden, Mich., March 21, 1865; son of Almon Justice Squier and Emily (Gardner) Squier; unmarried.

Education: Dryden Public Schools, Michigan, graduate of U. S. Military Academy, West Point, 1887, Fellow, John Hopkins University, Baltimore, Md., 1893 Ph. D., John Hopkins University.

Professional: Officer of the U. S. Army; appointed 2d. Lt. 3d Artillery, June 12, 1887; 1st Lt., June 30, 1893; Capt. Signal Officer Vols., May 20, 1898; Lt.-Col. Chief Signal Officer Vols., July 18, 1898; hon. discharged from Vols., Dec. 7, 1899; 1st Lt. Signal Corps U. S. Army, Feb. 23, 1899; Capt. Signal Officer Vols., April 17, 1899; hon. discharged from Vols., June 30, 1901; Capt. Signal Corps U. S. Army, Feb. 2, 1901; Maj., March 2, 1903; command U. S. Cable-ship Burnside 1900-1902, during laying of Philippine cable-telegraph system, U. S. Military Attache at London, England, 1912; Lt.-Col., Signal Corps; Col. Signal Corps; Brigadier General, Signal Corps; Major General, Signal Corps; Chief Signal Officer.

Aeronautical Activities: In charge of the U. S. Army Air Service from June 1916 to May 1918.

War Honors: July 2, 1919 decorated with the insignia of the Order of Knight Commander of St. Michael and St. George, by Field Marshal Sir Douglas Haig, at London, England; Sept. 5, 1919, received the Distinguished Service Medal, U. S. Army, for exceptionally meritorious and distinguished service; May 1919, awarded the Franklin Medal by the Franklin Institute, Philadelphia, Pa.; April 1919, elected member of National Academy of Sciences.

Books: "Military Aeronautics," 1908; "Aeronautics in the United States," 1918.

Member: Aero Club of America; American Association for Advancement of Science; American Institute of Electrical Engineers; American Physical Society; National Academy of Sciences; Institute of Radio Engineers; Franklin Institute; Physical Society of London; Army and Navy Club; Chevy Chase Club; University Club (N. Y.); Metropolitan Club.

Present Occupation: Major General, Chief Signal Officer of the Army.

Address: Chief Signal Officer, War Department, Washington, D. C.; home, The Bachelor Apartment, 1737 H. Street, N. W., Washington, D. C.

Emory D. Stanley

STANLEY, EMORY D., Lt. Comdr. U. S. Navy; born, Hooper, Nebr., Nov. 16, 1881; son of C. C. Stanley and Kate (Bosler) Stanley; married, Eva Cooper, Dec. 19, 1908.

Education: South Omaha High School; A. B. 1904, University of Nebraska.

Professional: Armour & Co., 1904-1905; U. S. Navy, Supply Corps, 1905-1921.

Aeronautical Activities: Member, Navy Aviation Conference, 1920-1921.

War Service: World War, Navy.

Member: Racquet Club of Washington.

Present Occupation: Lt. Comdr., U. S. Navy.

Address: Navy Department, Washington, D. C.

John Fanz Staub

STAUB, JOHN FANZ, Architect; born, Knoxville, Tenn., Sept. 12, 1892; son of Fritz Staub and Anna C. Staub; married, Madeleine L. Delabarre, Oct. 4, 1919.

Education: Knoxville public schools; B.S. 1913, University of Tennessee; B.S. 1915, M.S. 1916, Mass. Inst. of Tech.

Professional: Associated with H. T. Lindeberg, architect, for one year previous to war; returned to same firm, March 1919; to become junior member of the firm on July 1, 1921.

Aeronautical Activities: U. S. Naval Air Station, Killingholme, England, April 1918 to Dec. 1918; Ground School, M.I.T., Aug., Sept. 1917; Pensacola Aero Station, Oct. 1917 to Feb. 1918; Taliaferro Field, March 1918.

Flying Rating: U. S. Naval Reserve Flying Corps Pilot, No. 263; Hydroaeroplane Pilot Certificate, No. 164.

War Service: July 1917 to Jan. 1919; commissioned Ensign, U. S. N. R. F., Jan. 1918; commissioned, Lieut. (j. g.), Oct. 1, 1918.

War Honors: Citation: "For distinguished service in the line of his profession as a pilot of a seaplane, carrying out a large number of hazardous war patrol flights in the vicinity of enemy coasts with skill and daring; and especially on the occasion of the attack on a submarine on July 9, 1918, when as observer of the seaplane, he dropped bombs, which either destroyed or seriously damaged the submarine." Navy Cross.

Member: American Institute of Architects.

Present Occupation: Architect.

Address: 2 West 47th St.; home, 1142 Madison Ave., New York, N. Y.

Willis Irl Stebbins

STEBBINS, WILLIS IRL, Auto Accessories; born, Gothenburg, Nebr., March 29, 1895; son of W. M. Stebbins and Avis (Wilcox) Stebbins.

Education: Public schools of Gothenburg, Nebr.; University of Nebraska.

Professional: Implement dealer; 1916, Border Patrol with 5th Nebraska Co. L.

Aeronautical Activities: S.M.A., Austin, Tex.; training at Scott Field, Camp Dick; flight commander at Kelly Field; commercial flying, 1919.

Flying Rating: Army Corps Pilot.

War Service: As above.

Present Occupation: Auto accessories.

Address: 1420 Lake Ave., Gothenburg, Nebr.



George O. Squier

Roman John Steichen

STEICHEN, ROMAN JOHN, Salesman; born, Perham, Minn., Dec. 22, 1895; son of John Steichen.

Education: St. Benedict's Academy, St. Joseph, Minn.; high school at St. Johns, Collegeville, Minn., 1909-1913; St. Johns University, 1913-1914.

Professional: 1915-1917, bookkeeper; army Aug. 1917 to May 1919; bond salesman, Feb. 1920 to present.

Aeronautical Activities: Aug. 1917, athletic director, 70th Aero Squadron, San Antonio, Tex.; Dec. 1917, on detached service with Royal Flying Corps, University at Toronto for purpose of studying Aerial Gunnery; Feb. 1918, instructor in Aerial Gunnery at Ellington Field also instructor at the Bombers Aerial Gunnery School at San Leon, Tex.; U. S. School of Military Aeronautics at the University of California, Oct. 1918 to Feb. 1919.

Flying Rating: Reserve Military Aviator, May 1919.

Present Occupation: Bond salesman.

Address: 529 Second Avenue South; home, 428 S. 8th Street, Minneapolis, Minn.

Harold Arnold Steiner

STEINER, HAROLD ARNOLD, Pajama Manufacturer; born, New York City, Nov. 8, 1890; son of Albert T. Steiner and Frankie (Arnold) Steiner.

Education: Phillips Andover Academy, 1908; B.A. 1912, Yale University.

Professional: Sales Manager, Steiner & Son, Inc.

Aeronautical Activities: Enlisted, July 13, 1917; graduated Princeton School Military Aeronautics, Oct. 1917; trained with British at Deseronto and Leaside, Canada and Ft. Worth, Tex.; Coast Patrol, Mineola, June 1918; overseas with 184th Aero Squadron, Issoudun, July 1918; Romorantin (ferry pilot) Aug. 1918 to Jan. 1919.

Flying Rating: Reserve Military Aviator, Feb. 1918.

War Service: Army, July 1917 to Feb. 1919.

Member: Andover Club; Yale Club (N. Y.); Aero Club of America.

Present Occupation: Sales Manager, Steiner & Son, Inc.; Treas., DeLuxe Air Service, Inc.

Address: Steiner & Son, Inc.; home, Metropolitan Hotel, Asbury Park, N. J.

Joseph Allison Steinmetz

STEINMETZ, JOSEPH ALLISON, Inventor; born, Philadelphia, Pa., March 22, 1870; son of John Steinmetz and Frances Morris (Janney) Steinmetz; married, Oma Frances Fields, 1903.

Education: Philadelphia Central High School;

special course in Metallurgy, Lehigh University, 1900.

Professional: Member of firm of Janney, Steinmetz & Co., established 1895, experts in design and production of seamless steel tanks, shells and pressure containers, poison gas, aerial drop bombs, and submarine Torpedo shells and mines.

Aeronautical Activities: Assisted Prof. Langley in producing seamless steel cylinders and shapes for Langley aeroplane; designed various devices for aerial warfare; founder and director, School for Aircraft Building, 1917-1918, Philadelphia; President, Aero Club of Pennsylvania, 1915-1921; overseas (civilian), special service, Dec. 1917 to March 1918.

War Service: Member, National Research Council, Engineering Division, Washington, D. C., 1918; member, Submarine Defense Association, N. Y., 1917-1918; commissioned Major, Ordnance (Reserve), March 1919.

Books: "Offensive Against the Submarine".

Member: American Society of Mechanical Engineers; Society of Automotive Engineers; Aero Club of America; Engineers' Club of Philadelphia; Sunnyside Golf Club; Philadelphia Cricket Club; Bankers' Club of America; Manufacturers' Club of Philadelphia; Sons of Revolution; Colonial Society; Barons of Runnemede; Naval and Military Order, Spanish American War.

Present Occupation: Member, firm of Janney, Steinmetz & Co.

Address: Morris Bldg., Philadelphia; home, 736 Westview St., Germantown, Philadelphia, Pa.

John Alexander Steward

STEWART, JOHN ALEXANDER, Student; born, Chattanooga, Tenn., Aug. 6, 1897; son of Clarence Starr Stewart and Anna M. Stewart; married, Anna M. Blispinghoff, 1890.

Education: Public schools; Preparatory School, McCallie; studying for B.S. at University of Virginia at present time.

Aeronautical Activities: Ground School; 9th Detachment of Cadets, Oct. to March 1918; French School of Aviation at Chateauroux, France; 3rd A.I.C. at Issoudun; 213th Squadron 3rd Pursuit Group, Oct. 1918 to Feb. 1919.

Flying Rating: Reserve Military Aviator.

War Service: July 1917 to July 1919.

Present Occupation: Student at University of Virginia.

Address: University of Virginia, Charlottesville, Va.; home, Battery Place, Chattanooga, Tenn.

Robert J. Stewart

STEWART, ROBERT J., President of American Aircraft, Inc.; born, April 2, 1892; son of Robert Stewart and Florence Stewart.

Education: Baltimore Polytechnic Institute.

Professional: 1913-1914, Electrical and Mechanical Engineer, designing of gasoline motors and electrical accessories; 1914-1919, Loane Engineering Co.; Superintendent of the American Propeller & Mfg. Co., manufacturers of the Paragon Aeronautical Propeller; 1920, practiced Mechanical Engineering.

Aeronautical Activities: 1914-1919, Superintendent of American Propeller & Mfg. Co.; 1915, associated with F. G. Ericson and the Jannus Bros., receiving instruction on flying boats; 1915, built two successful models of flying boats, single and twin engined; 1916, in military service at Mexican Border; 1916-1919, engaged in design and production of aeronautical war supplies; 1921, organized first active aeroplane manufacturing, distributing and operative company in the state of Maryland.

Member: American Flying Club of Baltimore; Engineers Club.

Present Occupation: President, American Aircraft, Inc.

Address: 3719 North Road, Baltimore, Md.

Henry E. Stickney

STICKNEY, HENRY E., Commercial Aviator; born, New York, N. Y., Jan. 8, 1895; son of Henry E. Stickney and Mary (Sullivan) Stickney; married, D. M. Black, Sept. 24, 1920.

Education: New York public schools; Vermont Academy.

Aeronautical Activities: Experimented on gliders, 1916; civilian flying, 1917; commercial flying since close of war.

War Service: French Army, 1917; American Army, 1918; 1st Lieut., May 1918; Capt., April 1919; member of French escadrille Spad 150; served on sectors, Belfort, Voges Mt., St. Quentin, Montclider, Noyon, Chateau Thierry, Second Marne, St. Mihiel, Rethel, and North of Meuse-Argonne.

War Honors: Croix de Guerre, (French).

Member: American Legion; Aero Club of France.

Present Occupation: Aviator; passenger carrying and exhibition.

Address: Springfield, Vt.; home, 28 Henry St., Bellows Falls, Vt.

Stuart Flenniken Stilwell

STILWELL, STUART FLENNIKEN, Automobile business; born, Carmichaels, Pa., May 7, 1889; son of George A. Stilwell and Mary F. Stilwell; married, Charlotte W. Stauffer, March 2, 1918.

Educated: Carmichaels Public and High Schools.

Professional: Selling automobiles.

Aeronautical Activities: Ohio State University Ground School, Texas, University Ground School, 1918; Cadet, Kelly Field No. 2, Completed training, May 8, 1919.

Flying Rating: Pursuit Pilot, License No. 4575.

War Service: Jan., 1918 to May, 1919.

Present Occupation: Automobile Salesman.

Address: Keystone Auto Corp.; home, 75 Nutt Ave., Uniontown, Pa.

John David Stodder

STODDER, JOHN DAVID, Asst. Secretary, American Wire Fabrics Co.; born, St. Louis, Mo., Dec. 19, 1893; son of John M. Stodder and Elizabeth Martha Stodder.

Educated: McKinley High School, St. Louis, Mo.

Professional: Assistant Secretary, American Wire Fabrics Co., Oct. 1916.

Aeronautical Activities: U. S. School Military Aeronautics, Oct. 1917; training at Rich Field and Ellington Field; commissioned 2nd Lieut., S.R.C., A.S., June 1918; 1st Lieut., S.R.C., A.S., March 1919.

Flying Rating: Reserve Military Aviator, June 1918.

War Service: As above.

Member: Aviation Club of Chicago.

Present Occupation: Assistant Secretary, American Wire Fabrics Co.

Address: 208 S. La Salle St.; home, 6330 Inglewood Ave., Chicago, Ill.

Rex R. Stoner

STONER, REX R., 1st Lieut. Air Service; born, Sedgwick, Kan., Jan. 8, 1891; son of George E. Stoner and Stella Stoner.

Educated: Public schools of Westminster, Md. and New Market, Ia.

Aeronautical Activities: U.S.S.M.A. Berkeley, Calif., Sept. 8, 1917; overseas, Nov. 23, 1917; Instructor at Issoudun; 41 Squadron (Pursuit); 138 Squadron (Pursuit); U. S., Feb. 1919, Kelly Field; Laredo, Aug. 1919; Pope Field, Aug. 1920; Langley Field, May 1921.

Flying Rating: R.M.A., March 13, 1918; Airplane Pilot.

War Service: April 6, 1917 to Feb. 1919.

Present Occupation: 1st Lieut. Air Service.

Address: Langley Field, Hampton, Va.; permanent, 7411 59th Ave., Portland, Ore.

William Bushnell Stout

STOUT, WILLIAM BUSHNELL, Aeronautical Engineer; born, Quincy, Ill., March 16, 1880; son of Rev. J. F. Stout and Mary L. (Bushnell) Stout; married, Alma E. Raymond, June 16, 1905.

Educated: Public schools of St. Paul, Minn.; Hamlin University, St. Paul; University of Minnesota, Mechanical Engineering.

Professional: Chief Engineer, Schmeier Motor Truck Co. of St. Paul; Features and Illustrating, Chicago Tribune; Technical Editor, "Motor Age"; Founder and first Editor, "Aerial Age" (Chicago).

Aeronautical Activities: Chief Engineer, Aircraft Division, Packard Motor Car Co., 1916; Technical Advisor, Aircraft Board, 1917; Designer and builder of first internally-trussed plane flown in United States, Dec. 1918.

War Service: Technical Advisor, Aircraft Board, reporting direct to Howard E. Coffin. Later assigned to Dayton, Ohio, Engineering Division of McCook Field, in building of internally-trussed experimental constructions.

Member: Detroit Athletic Club; Aero Club of America; Society of Automotive Engineers; Aviation Country Club.

Present Occupation: President and General Manager, Stout Engineering Laboratories, Inc.

Address: 6282 Beaubien St.; home, 109 Seaward Ave., Detroit, Mich.

George Malcolm Stratton

STRATTON, GEORGE MALCOLM, Professor of Psychology; born, Oakland, Calif., Sept. 26, 1865; son of James T. Stratton and Cornelia A. Stratton.

Educated: Public schools of Oakland, Calif.; A.B. 1888, University of California; A.M. 1890, Yale University; Ph.D. 1896, Leipzig University.

Professional: Instructor, Philosophy, U. C., 1892-1894; Instructor of Psychology, 1896-1897; Assistant Professor, 1897-1899; Associate Professor, 1899-1904; Professor of Psychology at Johns Hopkins University, 1904-1908; University of California, 1908 to date.

Aeronautical Activities: Officer in Charge Psychology Section, Med. Res. Lab., Air Service,

1918; President, Aviation Examination Board, San Francisco, 1917-1918; Research in Aviation, San Diego, 1918.

Books: "Experimental Psychology and Culture", 1903; "Psychology of the Religious Life", 1911; "Theophrastus and the Greek Physiological Psychology before Aristotle", 1918.

Member: American Psychological Association.

Present Occupation: Professor of Psychology, University of California.

Address: Psychological Laboratory, University of California; home, 55 Canyon Road, Berkeley, Calif.



Samuel W. Stratton

Samuel Wesley Stratton

STRATTON, SAMUEL WESLEY, Physicist; born, Litchfield, Illinois, July 18, 1861; son of Samuel Stratton and Mary B. (Webster) Stratton.

Educated: High School; B.S., University of Illinois, 1884; D. Sc., Pittsburgh, 1903; Eng. D., 1903; D. Sc. Cambridge, 1908; D. Sc., Yale, 1919.

Professional: Instr. Math. and Physics, Illinois, 1886-1889; Asst. Prof. Physics, 1889; Prof. Physics and Elec. Eng., 1889-1892; Asst. Prof. Physics, Chicago, 1892-1895; Assoc. Prof., 1895-1898; Prof., 1898-1901; Director, Bureau of Standards from 1901; Member, Int. Committee on Weights and Measures; Chairman, National Screw Thread Commission; U. S. Delegate, Int. Elec. Congresses, St. Louis 1904, London, 1909.

Aeronautical Activities: Secretary and member National Advisory Committee for Aeronautics since 1913.

Member: National Academy of Sciences; American Association for Advancement of Science; American Physical Society; American Institute of Electrical Engineers; American Philosophical Society; Washington Philosophical Society; National Research Council; American Society of Mechanical Engineers; American Society of Testing Materials.

Present Occupation: Director, Bureau of Standards.

Address: Bureau of Standards, Washington, D. C.

Samuel Meredith Strong

STRONG, SAMUEL MEREDITH, Physician; born, Logansport, Ind., Aug. 8, 1877; son of Edward Strong and Margaret (Green) Strong; married, Zerlene Quimby, Sept. 1902.

Educated: Public schools of New York City; Friends School, Providence, R. I.; Columbia University; M. D. 1902, College of Physicians and Surgeons.

Professional: Practice of general operative surgery at New York City until 1917.

Aeronautical Activities: Began flying training, June 1918; designed airplane ambulance in June 1918; in command of fleet of airplanes on cross-country flight from Carlstrom Field to Hazelhurst Field and return to Florida, June 1919; Flight Surgeon, 1st Prov. Air Brigade, Langley Field, summer 1921; Surgeon, 88th Squadron, 1921; discharged, Feb. 24, 1922.

Flying Rating: Reserve Military Aviator, March 1919; Airplane Pilot, June 1920.

War Service: Medical Corps, U. S. Army, April 1917 to date.

Member: Air Service Medical Association; American Medical Association; New York County Medical Association.

Present Occupation: Physician.

Address: 616 Madison Ave., New York City; home, 231 Park Place, Brooklyn, N. Y.

William P. Sullivan

SULLIVAN, WILLIAM P., Commercial Aviation; born, San Francisco, Calif., March 20, 1891; son of William Sullivan and Mary C. (Manion) Sullivan.

Educated: Public schools, Humboldt, St. Peters and Technical, (Mechanical and Aeronautical Engineering) all of San Francisco.

Professional: Pattern maker, engineering and designing, Pacific Gear & Tool Works, Pacific Fdry. Co., of San Francisco, Airliner Engineering Corp., New York City.

Aeronautical Activities: Experiments with gliders and models, airplane design and construction, 1908-1912; supervising instructor of construction and repair, U. S. Naval Air Station, Pensacola, Fla., 1917-1918; compiled U. S. Naval Aviation Mechanics Text Books, Columbia University, 1919, and officer in charge of completion of same at U. S. Naval Aviation Mechanics School, Great Lakes, Ill., 1920; Assistant Aeronautical Designer, Remington-Buranelli Airliner, New York, 1920.

Present Occupation: Airliner Engineering Corp.

Address: Amityville, New York, Box 486; home, 3524 22nd St., San Francisco, Calif.

James A. Summersett Jr.

SUMMERSETT, JAMES A., Jr., Capt., Air Service; born, Florence, S. C., Aug. 23, 1891; son of James A. Summersett and Anna A. Summersett; married, Blanche Loretta Galvin, July 10, 1919.

Educated: Columbia Grammar School; Columbia High School; Newberry College, Newberry, S. C.

Professional: Enlisted in 8th Cavalry, Aug. 21, 1911; discharged by purchase, Aug. 1, 1913; enlisted in Cavalry, March 11, 1915; transferred to Aviation Section Signal Corps, April 5, 1915; discharged to accept commission, March 19, 1917.

Aeronautical Activities: Student pilot, Tours, France, Oct. 10, 1917 to Dec. 24, 1917; day bombardment pilot at front, April 18, 1918 to Armistice; commanding 96th Aero Squadron, Sept. 9, 1918 to Armistice; Commanding Officer, 1st day bombardment group from Armistice till disbandment.

Flying Rating: French Brevet.

Present Occupation: Captain, Air Service.

Address: Carlstrom Field, Arcadia, Fla.; home, 2328 Park St., Columbia, S. C.

George Sutherland

SUTHERLAND, GEORGE, Electrical Engineer; born, Fort Plain, N. Y., Nov. 20, 1884; son of Lewis F. Sutherland and Helen Harriett Sutherland; married, Ruth Trench, Nov. 16, 1920.

Educated: Fort Plain High School; A.B. 1907, Yale University; B.S. in Electrical Engineering, 1916, Mass. Inst. of Tech.; B.S. E.E. 1916, Harvard University.

Professional: Assistant Engineer and Valuation Engineer of N.Y.N.H. & H. Railroad; Engineer in Electrical Engineering Division of Stone & Webster, Inc.; Engineer in Electrical Engineering Department, United Electric Light & Power Co. to date.

Aeronautical Activities: Ohio State University Ground School, 1917; Cadet, Tours, France, Nov. 1917 to May 1918; Instructor in flying, Tours, France; Observation Pilot, Artillery School, Saumur, France; student flier, 3rd A.I.C., Issoudun, France, 1918.

Flying Rating: Reserve Military Aviator, April 1918.

War Service: Enlisted July 1917 and discharged Sept. 1919.

Member: Yale Club of New York; American Institute of Electrical Engineers; N.E.L.A.

Present Occupation: Electrical Engineer.

Address: 130 East 15th St., New York City; home, 590 East 21st St., Brooklyn, N. Y.

Jacques Michael Swaab

SWAAB, JACQUES MICHAEL, Executive; born, Philadelphia, April 21, 1894; son of Mayer M. Swaab, Jr. and Etta (Stein) Swaab.

Educated: Claghorn school, Philadelphia; Central High School, Philadelphia; Sachs Collegiate Institute, N. Y.; 1916 B.S., University of Pennsylvania.

Professional: Representative, Frank H. Flee Corp., Phila., Pa.

Aeronautical Activities: Started to fly in Aug. 1917.

Flying Rating: Military Aviator.

War Honors: Cited for distinguished and exceptional gallantry at Metz, France on Sept. 8, 1918; cited for distinguished and exceptional gallantry at Thriaucourt on Oct. 31, 1918; Distinguished Service Cross, Aug. 23, 1920; recommended for Congressional Medal of Honor April 1, 1919; American Ace, credited with 10 airplane victories.

Member: Mercantile Club; Phila., Pa.; Aero Club of Pennsylvania; Aero Club of America.

Present Occupation: President, Royal Blue Cigar Stores, Inc.
Address: 236 West 55th St.; home, No. 1 West 68th St., N. Y.

George Edmund Sykes

SYKES, GEORGE EDMUND, Financier; born, Rockville, Conn., June 4, 1880; son of George Sykes and Sarah A. (Fitten) Sykes; married, Bernice Deane Heath, April 6, 1904.

Educated: St. Paul's School, Concord, N. H.; Yale University.

Professional: Financier.

War Service: Major, Air Service; Engineer Officer of the South Texas District on the Staff of Col. James E. Fechet.

Member: Military order of Foreign Wars.

Present Occupation: Financier.

Address: Orchard Hill, Paicines, Calif.

Frank William Taft

TAFT, FRANK WILLIAM, Lawyer; born, Pittsburgh, Pa., April 7, 1891; son of Dr. Frank Ernest Taft and Jessie (Marion) Taft; married, Viljo Adelaide Latcher, Feb. 20, 1918.

Educated: Grammar and high schools, Rochester, N. Y.; B.S. 1913, Colgate University; A.B. 1914, Cornell University; Cornell Law School.

Professional: Attorney at law.

War Service: Commissioned 2nd Lieut. Aviation Section, Signal Corps, Nov. 27, 1917; C. O. and Supply Officer 220th Aero Squadron, Kelly Field; Marine Corps School, Savage Arms Corp, Utica, N. Y.; Supervisor of Instruction, Armour's School and Air Service School of Aerial Gunnery, Wilbur Wright Field; promoted to 1st Lieut., Air Service, Aug. 1918.

Member: Binghamton Club; Cornell Club; University Club; American Legion; Aero Club.

Present Occupation: Attorney at Law.

Address: 706 Security Mutual Bldg.; home, 16 Front St., Binghamton, N. Y.

Harold E. Talbott, Jr.

TALBOTT, HAROLD E., JR., Airplane Constructor; born, Dayton, Ohio, March 31, 1888; son of Harry E. Talbott and Katherine H. Talbott.

Educated: Sheffield Scientific School, Yale University.

Professional: President, Dayton Wright Co.; President, Dayton Securities Co.; Vice President, DeWeese-Talbott Co.

War Service: Major, Air Service.

Member: Aero Club of America.

Present Occupation: President, Dayton Wright Co.

Address: 1st and Ludlow Streets; home, Runnymede, Dayton, Ohio.

John Preston Tarbox

TARBOX, JOHN PRESTON, Patent Attorney and Engineer; born, Georgetown, S. C., Sept. 14, 1884; son of Frank Green Tarbox and Mattie Florence Tarbox; married, Mary Kolbe, Nov. 24, 1909.

Educated: Winyah Graded School, Georgetown, S. C.; Clemson Agricultural College, S. C.; National University, Washington, D. C.; George Washington University, Washington, D. C.; B. S., L. B., and M. P. L. (Master patent Law).

Professional: Hardware Clerk; Millwright; Electrician; Assistant Consulting Engineer; Electrical Engineer; Patent Attorney; Member bar, S. C.; District, Colo.; and N. Y. State.

Aeronautical Activities: 1910-1911 organization of Tarbox Safety Aircraft Co.; 1913 to date, the following connections with the Curtiss Aeroplane and Motor organizations; 1913-1918 Patent Counsel; 1914-1916 Executive Engineer; 1917, Engineer in charge, Erection Plant, Curtiss Engineering Corp., Garden City; 1917-1919 Director Research Department; 1917 and 1918 Member board Directors, Manufacturers Aircraft Ass'n.; 1917 to date, Chairman Patents Committee, Manufacturer's Aircraft Assn.; 1919 to date, Assistant to Mr. Glenn H. Curtiss; 1917 to date, Secretary, Curtiss Engineering Corporation; 1919, Executive Engineer, Curtiss Engineering Corp.

War Service: With Curtiss Aeroplane & Motor Corporation and Curtiss Engineering Corp.

Member: American Patent-law Association; Society Automotive Engineers.

Present Occupation: Assistant, Mr. Glenn H. Curtiss.

Address: Care of Curtiss Aeroplane & Motor Corp., Garden City, N. Y.; home, 94 Brook St., Garden City, N. Y.

Ernest Evrett Tattersfield

TATTERSFIELD, ERNEST EVRETT, Aviator; born, Minneapolis, Minn., Aug. 7, 1897; son of Richard Tattersfield and Anna Tattersfield.

Educated: Public schools; one year, University of Minnesota.

Professional: Pilot and aerial acrobat.

Aeronautical Activities: Ground School, University of California; training at Kelly Field, Brooks Field, West Point, Ky., and March Field; with Federated Fliers of Minneapolis and U. S. Aircraft Corp., Spokane, Wash.

War Service: 2d Lieut., A.S.S.R.C. March 1918 to May 1919.

Member: Aero Club of Spokane; Aero Club of Minneapolis.

Present Occupation: Pilot.

Address: 3616 Third Avenue South, Minneapolis, Minn.

Charles Fayette Taylor

TAYLOR, CHARLES FAYETTE, Engineer; born, New York City, Sept. 24, 1894; son of Henry Ling Taylor and Margaret (Brodt) Taylor; married, Isabelle Tyssowski, June 25, 1918.

Educated: Public schools of Montclair, N. J.; Ph.B. 1915, Sheffield Scientific School; M.E. 1920, Yale University.

Professional: Engineer, American International Corp., New York, 1916-1917.

Aeronautical Activities: I.A.A.E., Signal Corps, 1917; in charge aeronautical engine testing, Washington, D. C., 1917; Engineer in charge of Power Plant Laboratory, Engineering Division, U. S. Air Service, McCook Field, April 1920 to date.

War Service: Lieut., U.S.N.R.F., Oct. 1917-Mar. 1919.

Member: Society of Automotive Engineers; Engineers Club of Dayton.

Present Occupation: Engineer.

Address: McCook Field; home, 226 Cambridge Ave., Dayton, Ohio.

David Watson Taylor

TAYLOR, DAVID WATSON, Rear Admiral, U. S. Navy; born, Louisa Co., Va., March 4, 1864; son of Henry Taylor and Mary Minor (Watson) Taylor; married, Imogene Maury Morris, Oct. 26, 1892.

Educated: At home until entered Randolph Macon College, Ashland, Va.; 1885, U. S. Naval Academy; Honorary, Eng. D. Stevens Institute; D. Sc. George Washington University.

Professional: Graduated Naval Academy 1885; Assistant Naval Constructor 1886; Graduated Royal Naval College, Greenwich, England, 1888; Naval Constructor 1892; Chief of Bureau Construction and repair 1914 to date.

War Service: Served as Chief of Bureau of Construction and Repair during World War; Distinguished Service Medal; Commander of Legion of Honor (French).

Books: "Resistance of Ships and Screw Propulsion" (1893); "Speed and Power of Ships" (1910).

Member: Army and Navy Club (Wash.); Society of Naval Architects and Marine Engineers; Institution of Naval Architects (British).

Present Occupation: Chief Constructor, U. S. Navy; Chief of Bureau of Construction and Repair.

Address: Navy Department, Washington, D. C.; home, 1813 19th St. N. W. Washington, D. C.

Elmer Lewis Taylor

TAYLOR, ELMER LEWIS, Student; born, Navarro County, Tex., Oct. 11 1893; son of H. W. Taylor and Pearl Taylor.

Educated: B.S. 1916, B.A. 1917, East Tex-



David W. Taylor

as Normal College; B.A. 1921, East Texas State Normal College.

Aeronautical Activities: Graduated S.M.A., Austin, Tex., Feb. 1918; Camp Dick to April 1918; Carruthers Field, Langley Field, Hicks Field, Camp Knox, April 1918 to Jan. 1919; commissioned 2nd Lieut. A.S., June 1918.

Flying Rating: Reserve Military Aviator.

Present Occupation: Student.

Address: Arlington, Tex.; home, Ira, Tex.

James Blackstone Taylor, Jr.

TAYLOR, JAMES BLACKSTONE, JR., Executive; born, New York City, Sept. 23, 1897; son of James B. Taylor, Sr. and Lydia (Thorne) Taylor; married, Aileen B. Sedgewick, Nov. 14, 1917.

Educated: Pomfret School, Pomfret, Conn.; Princeton University.

Professional: Assistant to President of Upressit Products Corp., formerly, U. S. Metal Cap and Seal Co., 1918 to present time.

Aeronautical Activities: Joined U. S. Naval Air Service in 1917; trained at Bayshore, L. I.; was instructor in advanced flying at Miami, Fla., and later test pilot for Bureau of Operations; while test pilot for Planning Section of Operations, tested the following: Loening "Cat", "Kitten", large Loening monoplane, Curtiss "Wasp" triplane, "H. A. Fighter", and the "Davis" gun carrier; tested the Vaught "V. E. 10" flying boat and the Sperry "Messenger"; has flown over fifty different types of machines, both land and water.

Flying Rating: Expert Aviator No. 183; Aero Club License No. 222; Naval Aviator No. 437. **War Service:** U. S. Naval Air Service, July 1917; on inactive duty Feb. 1919, rank of Lt. U. S. N. R. F.

Member: Aero Club of America; Piping Rock; Metropolitan; Society of Automotive Engineers.

Present Occupation: Manufacturer.

Address: 103-107 West 13th St.; home, 471 Park Avenue, New York City.

Lew Wallace Wendell Taylor

TAYLOR, LEW WALLACE WENDELL, Missionary; born, Three Oaks, Mich., Jan. 10, 1895; son of William Landon Taylor and Dora Amelia (Smith) Taylor; married, Frances Filson, Dec. 7, 1918.

Educated: Grammar and high school; A. B. 1920, Hastings College, Hastings, Neb.; M. A. 1921, University of Chicago; two years, McCormick Theological Seminary.

Aeronautical Activities: Commissioned 1st Lieut., Aviation Section, Signal Reserve Corps, Nov. 8, 1917; two months with 54th Cie d' Aerostiers, French Army in Champagne, beginning Jan. 2, 1918; one month with 84th Cie d' Aerostiers; duty with 2nd Balloon Co. in Toul and Chateau Thierry sectors, three months; Souge Balloon School, one month; duty with 69th Balloon Co., three months in St. Mihiel salient; dirigible flying at Pensacola and Langley Field, eight months.

Flying Rating: Balloon Observer, 1918; spherical Balloon Pilot License; Dirigible Balloon Pilot License.

War Service: Army, May 5, 1917 to Oct. 10, 1919; overseas one year.

War Honors: Special commendation in com-



Harold E. Talbott, Jr.

munication sent by Commanding General, 26th Division, June 27, 1918.

Present Occupation: Missionary.

Address: Vengurla, India; home St. Edward, Nebr.

Yantis Halbert Taylor

TAYLOR, YANTIS HALBERT, 2nd Lt., Texas National Guard; born, Bartlett, Tex., July 29, 1898; son of M. W. Taylor and Rosa (Lee) Taylor.

Educated: Belton High School; Peacock Military College.

Professional: Contracting business before war. *Aeronautical Activities:* Graduated S.M.A., Austin, Tex., Aug. 1918; training at Kelly Field, March 1919; since that time doing commercial flying and advertising for newspaper; commissioned 2nd Lieut. in Texas National Guard Air Service on Jan. 19, 1922 and since that time has been employed in locating stills in East Texas.

Flying Rating: Reserve Military Aviator, March 1919.

War Service: Air Service, Jan. 1918 to March 1919.

Member: Aero Club of America.

Present Occupation: 2nd Lt. Texas National Guard Air Service.

Address: Belton, Tex.

Edmund R. Tennant

TENNANT, EDMUND R., Civilian Aviator; born, Des Moines, Iowa, Jan. 7, 1901; son of H. R. Tennant and Jessie M. Tennant.

Educated: Public schools of Elkpoint, S. Dak.; Central High School, Sioux Falls, S. Dak.

Aeronautical Activities: Exhibition flying; aerial acrobat.

Present Occupation: Civilian flying.

Address: 715 South Dakota Ave., Sioux Falls, S. Dak.

Harold Wesley Tennant

TENNANT, HAROLD WESLEY, Civilian Aviator; born, Athelston, Iowa, June 7, 1896; son of H. R. Tennant and Jessie M. Tennant.

Educated: Elkpoint, S. Dak. High School; Electrical Engineering, University of South Dakota.

Professional: Wholesale grocery business.

Aeronautical Activities: Enlisted in Air Service, 1917; instructor on motors, 1918; Captain in Reserves, 1919; civilian flying to date.

Flying Rating: Airplane Pilot.

Member: American Association of Engineers.

Present Occupation: Wholesale grocery business and civilian aviator.

Address: 715 South Dakota Ave., Sioux Falls, S. Dak.

Ashton Melville Tenney

TENNEY, ASHTON MELVILLE, Textile Engineer; born, Granville, N. Y., May 29, 1888; son of Dr. W. A. Tenney and Almira (Hicks) Tenney; married, Mabel Louise Fritchard, Oct. 20, 1915.

Educated: Granville High School; Norwich University; University of Chicago; Cornell University.

Professional: With The "Anco" Mills, Mfgs. of automobile tire fabrics, 1913; Warwick Mills, 1914; to date, Wellington Sears & Co.

Aeronautical Activities: Contributed to the improvement in design of airplane, balloon and parachute fabrics.

War Service: 1916-1917, Industrial Aircraft Service; 1918, employed by War Department as Consulting Aeronautical Mechanical Engineer, attached to Fabric Section, Bureau of Aircraft Production, Airplane Engineering Division, Dayton, Ohio.

Books: "Airplane Fabric Development Suggested Research", "Comparative Analysis of 5x5 Baskets and Grade A Cotton Airplane Fabrics", "Experimental Determination of the Effect of Fabric Moisture in its Relation to Dope Tension and its Adherence", "Warwick Airplane Fabrics", includes description of non-tearing 5x5 baskets and 3 oz. seamless aero-cord.

Member: Associate, American Society Mechanical Engineers; American Society Testing Materials; British Textile Institute; Arkwright Club.

Present Occupation: Textile Engineer, Wellington Sears Co.

Address: 66 Worth St.; home, 521 West 185 St., New York City.

Edward Andrus Terhune, Jr.

TERHUNE, EDWARD ANDRUS, JR., Commercial Aviator; born, Dorchester, Mass., June 3, 1895; son of E. A. Terhune, Sr. and Emma G. (Haven) Terhune; married, Gladys Thompson, March 29, 1922.

Educated: Dorchester High School; B.S. in Structural Engineering, 1917, Tufts College.

Professional: Organized one of the first commercial aviation companies in country; operated first aerial taxi and express in N. E. and first to fly a commercial plane up the Connecticut Valley;

Trass. and General Manager of The Eastern Aircraft Corp.

Aeronautical Activities: Naval Aviation, M.I.T. Ground School, 1918; trained at Key West, Fla., Miami, Montic, France, Calais, France; Northern Bombing Squadron, Malpensa, Italy, Oct. 1918; Jan. 1919, with Italian Army (Italian Flying Brevet).

Flying Rating: Ensign (qualified pilot).

War Service: As above.

Member: Aero Club of America; Aero Club of Massachusetts; Federation Aeronautique Internationale.

Present Occupation: Treasurer and General Manager, The Eastern Aircraft Corp.

Address: 25 Howard Ave., Brookline, Mass.

Robert Gordon Thach

THACH, ROBERT GORDON, Lawyer; born, Burnside, La., Dec. 27, 1891; son of Robert H. Thach and Stella (Bringer), Thach; married Mary Munger, June 16, 1917.

Educated: Public schools of Birmingham, Ala., A.B. 1910, Washington and Lee University, Lexington, Va.; LL.B. 1912, University of Alabama.

Professional: Practiced law in Birmingham, 1912-1916; member of firm, Thach and Underwood; served in Army, 1916-1919; practiced law in New York City since May 1919; member of firm, Whitman, Ottinger & Ransom since June 1920; member of Association of the Bar of City of New York.

Aeronautical Activities: Air Service, A.E.F., Oct. 1917 to Jan. 1919; Officer in Charge Observation Training, Training Section, Air Service, A.E.F., 1918.

Flying Rating: Reserve Military Aviator, Sept. 1917.

War Service: 1st Lieut., 1st Alabama Cavalry, Aug. 1916 to July 1917; Cadet, 1st Lieut., Captain and Major, Air Service.

War Honors: French Legion of Honor; citation by C. in C., A.E.F.

Member: Aero Club of America; Bar Association of City of New York.

Present Occupation: Lawyer.

Address: 120 Broadway, New York City; home, 439 Rochelle Terrace, Pelham Manor, N. Y.

William Thomas Thomas

THOMAS, WILLIAM THOMAS, Consulting Engineer; born, Rosario, Argentine Republic, Sept. 18, 1887; son of Thomas Thomas and Olive (Wolcott) Thomas; married, Olive Rebecca Wolcott, April 16, 1913.

Educated: Dulwich Preparatory School; Dulwich College (England); Central Technical College, London (Engineering); A.C.G.I. 1908, Civil and Mechanical Engineering.

Professional: Shop experience with British Westinghouse Co., Trafford Park, England, 1903-1904; drafting and designing experience with Herring-Curtiss Co., Hammondsport, N. Y., 1909; commenced aeronautical experiments in 1909 at Hammondsport and later at Hornell, N. Y.; founded firm of Thomas Brothers.

Aeronautical Activities: 1911, Founded firm of Thomas Brothers; 1912, President and founder of Thomas Bros. Aeroplane Co.; 1915, President Thomas Aeromotor Co. at Ithaca, N. Y.; Vice President and Manager, Airplane Department, Thomas-Morse Aircraft Corp. during the war.

Member: Society of Automotive Engineers; Aero Club of America.

Present Occupation: Vice President and Consulting Engineer, Thomas-Morse Aircraft Corp.

Address: 510 E. Seneca St., Ithaca, N. Y.

Everett Laing Thompson, Jr.

THOMPSON, EVERETT LANG, JR., Engineer; born, Brooklyn, N. Y., July 11, 1893; son of Everett Laing Thompson, Sr. and Minnie A. Thompson; married, Fritz Dorothy Euler, Sept. 24, 1918.

Educated: Public schools of Brooklyn, N. Y. and Dover, N. J.; 1916, Stevens Inst. of Tech.

Professional: Engineer, Automatic Sprinkler Co. of America.

Aeronautical Activities: Enlisted, Sept. 1917 and after instruction in Ground School and Flying Station (Bay Shore, L. I. and Pensacola, Fla.) was commissioned Ensign.

Flying Rating: Ensign U.S.N.R.F.; Naval Aviator No. 1182; Aero Club of America, Hydro-aeroplane pilot certificate No. 345.

War Service: Flight Instructor, U. S. Naval Air Station, Pensacola, Fla.

Member: American Legion; Aero Club of America.

Present Occupation: Engineer.

Address: 123 William St., New York, N. Y.; home, 356 Williams St., East Orange, N. J.

William B. Thorne

THORNE, WILLIAM B., Teacher; born, Dell Rapids, Dakota Territory, Jan. 27, 1889; son of Albion Thorne and Clara M. (Bolster) Thorne.

Educated: Sioux Falls and Hartford, S. D. public schools; A.B. 1916, University of South Dakota.

Professional: High school teacher.

Aeronautical Activities: Exhibition and passenger carrying during summer of 1920.

Flying Rating: Reserve Military Aviator.

War Service: U. S. Air Service from April 1918 to Jan. 1919.

Present Occupation: Teacher.

Address: Brown's Valley, Minn.

John Wickliffe Throckmorton

THROCKMORTON, JOHN WICKLIFFE, Accountant; born, Morristown, N. J., March 30, 1899; son of Charles Wickliffe Throckmorton and Charlotte Edgerton (Alvord) Throckmorton.

Educated: Hill School, Pottstown, Pa.; schools abroad and graduated Townsend Harris Hall, New York City, 1917.

Professional: Accountant, 1919-1921.

Aeronautical Activities: Flying training at Kelly Field and Fort Sill, Okla., May 1918 to Feb. 1919; exhibition flying and passenger carrying for The American Aeroplane Exhibition Co., Humboldt, Tenn., June to Aug. 1920.

Flying Rating: Reserve Military Aviator, Sept. 1918.

War Service: Army, March 1917 to Jan. 1918; Air Service, Jan. 1918 to July 1919.

Member: Knickerbocker Canoe Club, New York City.

Present Occupation: Accountant.

Address: 18 East 41st Street; home, 9 East 97th St., New York, N. Y.

Theodore L. Tibbs

TIBBS, THEODORE L., Pilot Instructor; born, Montreal, Canada, January 23, 1883; son of Horace S. Tibbs and Clarissa B. Tibbs; married, Estelle L. Stutaford, December 1908.

Educated: 1893, Margate College, 1895, Eaton House School, 1898-1900, Clifton College, all of England.

Professional: Secretary to General Manager, G.T.R., 1900-1902; Operating Department, G.T.R., 1902-1904; Canadian Manager, Armour and Co. of Chicago, 1904-1910; Canadian Pacific Railroad, Operating Department, 1910-1914.

Aeronautical Activities: Canadian Infantry, 1914-1915; Royal Flying Corps, 1915-1917; Royal Air Force, 1917-1919; 1919-1920-1921, Commercial Aviation as salesman, flying instructor and passenger carrying.

Flying Rating: Pilot and Flight Commander, R.A.F.

War Service: As above.

Present Occupation: Chief Instructor, American Airways Training School.

Address: 1st Ave., 3rd St.; home, 706 13th St., College Point, Long Island, N. Y.

William Augustus Tilt

TILT, WILLIAM AUGUSTUS, Manufacturer; born, Paterson, N. J., Jan. 19, 1883; son of Albert Tilt and Adelaide E. (Raynor) Tilt.

Educated: Wilson and Kellogg School, New York City; Columbia University.

Professional: Silk manufacturing; Director of Phoenix Silk Mfg. Co., New York and General Manager of the Tilt Silk Mill, Pottsville, Pa.

Aeronautical Activities: Commanding Officer, 190th Aero Squadron at Ellington Field, Feb. to July 1918; Commanding Officer, 271st Bombing Squadron at Aberdeen Proving Grounds, July-Oct. 1918.

Flying Rating: Reserve Military Aviator, Oct. 1918.

War Service: American Ambulance Corps, Jan. 1914 (6 months), with the 1st Army of France.

Member: Columbia University Club; D.K.E., Club; Schuylkill Country Club.

Present Occupation: Silk Manufacturer.

Address: 334 Fourth Ave.; home, 17 West 49th St., New York City.

Clifford Albion Tinker

TINKER, CLIFFORD ALBION, Lieut., U. S. Navy; born, West Tremont, Me., June 4, 1877; son of James Tinker and Sadie Abbie (Dolliver) Tinker; married, Harriet Elizabeth Bates, Aug. 15, 1906.

Educated: Public schools, Bangor, Me.; 1899-1902, Massachusetts Agricultural College, Amherst, Mass.

Professional: 1902-1906, Ass't. Engineer, Westfield, Mass.; 1906-1917, practicing structural engineer, built foundries, shops, woolen mills, wire mills, hydro-electric plants, water works and street railways.

Aeronautical Activities: 1917-1921, Naval Aviation, organizing aviation mechanics schools; organized assembly and repair section, Naval Aviation in Europe; enrolled technical personnel; later, first Asst. Chief, Assembly and Repair Section; duty at Navy Dept., Information Section, Naval Aviation; now engaged in writing official history of naval aviation in world war.

War Service: 1917-1919.

Member: Royal Societies Club, England.

Present Occupation: Naval Reserve Officer.

Address: Navy Department; home 1831 Monroe St., N. W., Washington, D. C.

Morris M. Titterington

TITTERINGTON, MORRIS M., Aeronautical Engineering; born, Paris, Tex., July 20, 1891; son of George A. Titterington and Lena (Morris) Titterington; married, Pearl Bettis, June 4, 1918. *Educated:* Dallas High School, Tex.; Bliss Electric School; University of Dallas. *Professional:* With Curtiss Co. Hammondsport, N. Y., 1913-1914; Sperry Gyroscope Co., 1914-1920; Pioneer Instrument Co., 1920 to date. *Aeronautical Activities:* Built and flew own plane, 1912; took flying course at Curtiss School, 1914; in charge of aeronautical instrument work of the Sperry Gyroscope Co. in France and England, 1915-1917; carried out experimental work on instruments for Navy, 1917 until Armistice. *War Service:* Civilian in charge of experimental work for Navy, 1917-1918. *Member:* A. S. M. E. *Present Occupation:* Chief Engineer, Pioneer Instrument Co. *Address:* 136 Havemeyer St.; home, 61 Poplar St., Brooklyn, N. Y.

Edgar G. Tobin

TOBIN, EDGAR G., Automobile business; born, San Antonio, Tex., Sept. 7, 1896; son of William Tobin and Ethel Tobin. *Educated:* West Texas Military Academy. *Professional:* Bank clerk during 1915; Insurance from 1915 to April 1916; now sales manager for The Crockett Auto Co. *Aeronautical Activities:* American Air Service from April 1916 to Sept. 1919; American Ace officially credited with destruction of 6 enemy airplanes. *Flying Rating:* Junior Military Aviator. *War Service:* With French in Escadrille Lafayette from March 10, 1917 to July 1, 1918, then with 3rd Pursuit Group to the end of the war. *War Honors:* Croix de Guerre; Distinguished Service Cross. *Present Occupation:* Sales Manager for Hudson and Essex Automobile Distributor. *Address:* Roman and Oakland Sts.; home, 511 St. Marys St., San Antonio, Tex.

David Todd

TODD, DAVID, Professor; born Lake Ridge, N. Y., March 19, 1855; son of Sereno Edwards Todd and Rhoda (Peck) Todd; married, Mabel Loomis, March 5, 1879. *Educated:* Public schools, Brooklyn, N. Y.; 1870-1872, Columbia College; (1873-1875) A. B. 1875, Amherst College; A. M. 1878, Ph. D. 1888. *Professional:* Assistant U. S. Transit of Venus Commission 1875-1878; Professor of Astronomy Smith College 1882-1887; Professor of Astronomy and Navigation and Director, Observatory, Amherst College 1881-1920; Professor Emeritus since 1920. *Aeronautical Activities:* Started flying in free balloons 1909-1910; Many flights in connection with astronomical researches; first non-eclipse photograph, solar curve from ceiling, 15,000 ft., Feb. 26, 1922.

**Morris M. Titterington**

Member: Aero Club of America; President of Amherst Aero Club. *Present Occupation:* Retired, Carnegie Foundation. *Address:* Matsuba, Coconut Grove, Fla.

Henry Edwards Toncray

TONCRAY, HENRY EDWARDS, Commercial Pilot; born, Troup, Tex., July 30, 1894; son of E. H. Toncray and Annie (Edwards) Toncray; married, Marie Blanchard, Nov. 21, 1921 (while flying over New Orleans). *Educated:* Troup High School. *Professional:* Automobile and electrical business to 1913. *Aeronautical Activities:* Commercial flying, 1913-1921; organized Gulf States Aircraft Co. *Flying Rating:* R. M. A. *Member:* Aero Club of America. *Present Occupation:* Vice Pres. and Gen. Mgr., Gulf States Aircraft Co. *Address:* 300 Spring St., Shreveport, La.; home, 2805 James Ave., Shreveport, La.

Marie Blanchard Toncray

TONCRAY, MARIE BLANCHARD, Commercial Pilot; born, Shreveport, La., Feb. 24, 1902; daughter of Mr. and Mrs. J. M. Blanchard; married, Henry E. Toncray, Nov. 21, 1921 (while flying over New Orleans). *Educated:* Oakdale High School. *Aeronautical Activities:* With Gulf States Aircraft Co., 1921-1922. *Present Occupation:* Flying for Gulf States Aircraft Co. *Address:* 300 Spring St., Shreveport, La.; 2805 James Ave., Shreveport, La.

Stewart Wellington Torney

TORNEY, STEWART WELLINGTON, 1st Lieut., Air Service; born, Chicago, Ill., April 14, 1898; son of John Alfred Torney and Elizabeth (Ford) Torney; married, Edna Mae Hutton, April 14, 1920. *Educated:* Medford High School, Medford, Ore. *Aeronautical Activities:* Began flying, Jan. 1918; School of Aerial Gunnery, Fort Worth, Tex., June 1918; First Provisional Wing, Hazelhurst Field, July 1918 to Nov. 1918; Transcontinental Race in Oct. 1918; Primary Instructor, Dec. 1919 to Nov. 1920 at Carlstrom Field; School of Aerial Photography, Langley Field, Jan. 1921 to April 1921; First Provisional Air Brigade to date. *Flying Rating:* Reserve Military Aviator, May 1918; Airplane Pilot. *Present Occupation:* 1st Lieut., Air Service; Engineer and Transportation Officer of School of Aerial Photography. *Address:* Langley Field, Va.; home, 3657-17th Ave., N. E., Seattle, Wash.

Kirby Earl Torrance

TORRANCE, KIRBY EARL, Publishing Business; born, Whitman County, Wash., Jan. 7, 1893; son of William Grant Torrance and Margaret (Kirby) Torrance; married, Beatrice Mary Stone, May 21, 1918. *Educated:* Public schools of Spokane, Wash.; 1917, University of Washington. *Professional:* Newspaper work since 1913. *Aeronautical Activities:* Entered Ground School, Feb. 4, 1918, after transferring as 1st Lieut. from the 20th Infantry, Ft. Douglas, Utah; duty at Kelly, Hicks and Post Fields. *Flying Rating:* Reserve Military Aviator, June 11, 1918. *Present Occupation:* Editor, American Falls Press. *Address:* American Falls, Idaho.

George Platt Tourtellot

TOURTELLOT, GEORGE PLATT, 1st Lieut., Air Service; born, Dows, Iowa, Nov. 5, 1895; son of George M. Tourtellot and Mary L. Tourtellot. *Educated:* High school, Hudson, Wis.; Carroll College, Waukesha, Wis. *Aeronautical Activities:* Flying cadet, Oct. 31, 1917; commissioned, July 23, 1918; flying from Oct. 1917 to date in U. S., France, and Germany. *Flying Rating:* Airplane Pilot. *War Service:* Air Service, Army, Oct. 31, 1917 to close of war. *Present Occupation:* 1st Lieut., Air Service. *Address:* First Group (Pursuit), Ellington Field, Tex.; home, 6801 8th Ave., N. E., Seattle, Wash.

John H. Towers

TOWERS, JOHN H., Commander, U.S.N.; born, Rome, Ga., Jan. 30, 1885; son of William Magee Towers and Mary (Norton) Towers; married, Lily Carstairs, Oct. 5, 1915. *Educated:* Public schools of Rome, Ga.; Georgia Institute of Technology; Naval Academy, Class of 1906. *Professional:* Sea duty on Kentucky and Michigan, March 1905 to June 1911; aviation

**John H. Towers**

duty since 1911; Assistant Naval Attache, London, 1914-1916. *Aeronautical Activities:* Started flying, June 1911 under instruction of Glenn Curtiss; on various aviation duties since; in command of Trans-Atlantic Flight, May 1919. *Flying Rating:* Naval Aviator No. 3; Aero Club of America Certificate, No. 62. *War Honors:* Navy Cross, Royal Force Cross, Commandant Order of Tower and Sword (Portugal). *Member:* Army and Navy Club, (Wash.); Chevy Chase Club; Racquet Club of Washington; University and Racquet Clubs of Philadelphia; Aero Club of America; New York Yacht Club. *Present Occupation:* Capt. of the Yard, N.A.S. Pensacola, Fla. *Address:* Naval Air Station, Pensacola, Fla.; home, 1715-19th St. N. W., Washington, D. C.

Alfred Marston Tozzer

TOZZER, ALFRED MARSTON, Professor, Harvard University; born, Lynn, Mass., July 4, 1877; son of Samuel Clarence Tozzer and Caroline (Marston) Tozzer; married, Margaret Castle, April 10, 1909. *Educated:* Public schools, Lynn, Mass.; A. B. 1900, A. M. 1901, Ph. D. 1904, Harvard University. *Professional:* Professor of Anthropology, Harvard University; Curator, Peabody Museum, Harvard University. *Aeronautical Activities:* President, Aviation Examining Board, Denver, Colo., Oct. 1917 to March 1918; President, Aviation Examining Board, San Francisco, Calif., March 1918 to Dec. 1918. *War Service:* Commissioned, Captain, Air Service, Oct. 1917; discharged, Dec. 1919; commissioned, Major, Air Service, S.O.R.C., July 1919. *Books:* Numerous scientific books and pamphlets. *Member:* Fellow, Royal Geographical and Royal Anthropological Institute; American Academy of Arts and Sciences, etc. *Present Occupation:* Professor, Harvard University. *Address:* 7 Bryant St., Cambridge, Mass.

Ralph Martin Tripcony

TRIPCONY, RALPH MARTIN, Aeronautical Engineer; born, Kent, Ohio, July 22, 1890; son of Richard Martin Tripcony and Flora (Waldron) Tripcony. *Educated:* Kent High School, 1907; Mt. Union; Ohio State, Junior, 1914. *Professional:* Draftsman, Engineering Department, B. F. Goodrich Co., Akron, Ohio, 1915-1916; 1916-1917, Draftsman, B. & W. Boiler Co., Barberton, Ohio; 1917-1918, Draftsman and Designer, Aeronautical Department, Goodyear Tire & Rubber Co., Akron, Ohio; 1918-1919, Division Foreman and Design Representative, Balloon Department, Goodyear Tire & Rubber Co., Akron, Ohio; 1919-1920, Draftsman and Designer, Aeronautical Department, Goodyear Tire & Rubber Co., Akron, Ohio; 1921, Aeronautical Designer and Engineer, U. S. Army Balloon School, Ft. Omaha, Nebr. *Aeronautical Activities:* Extensive experience in design and production of nearly all types of spherical and observation balloons and airships,

which have been built in this country, including field work and flying experience.

Member: Vice President, Airship Engineering Society, Dayton, Ohio.

Present Occupation: Project Engineer in charge of spherical and observation balloon and airship design, lighter-than-air section.

Address: McCook Field, Dayton, Ohio; home, 818 Lake St., Kent, Ohio.

Henry Horace Tufford

TUFFORD, HENRY HORACE, Tire Specialist; born, Kensal, N. D., Jan. 23, 1887; son of Alva Tufford and Elizabeth (Barnett) Tufford.

Educated: Public schools and high school; business college and extension courses.

Professional: Accountant, 1906 to 1910; tire business, 1910 to 1918.

Aeronautical Activities: 1918, assigned Chief Vulcanizing Instructor, Air Service Mechanics Schools, St. Paul; commissioned 2nd Lieut., Air Service Reserve, 1920.

War Service: Instruction only.

Books: "Tire Repairing and Vulcanizing", 1918; "Tire and Vulcanizing", 1920; "Better Tiremen", 1920; "Tire Business Answered", 1921.

Present Occupation: Supervisor of Tire Training at Dunwoody Institute, Minneapolis, Minn.

Address: Box 673; home, 2307 Monroe St. N.E., Minneapolis, Minn.

Kelly Monroe Turner

TURNER, KELLY MONROE, Manufacturer; born, Pimento, Ind., July 16, 1859; son of Rev. J. M. Turner and Louise (Siner) Turner; married, Alice Brown, 1888.

Educated: Country schools.

Professional: Inventor and Manufacturer of the Dictograph, Acousticon, and Aviaphone.

Aeronautical Activities: Since 1903, experimental work on voice transmission instruments.

Member: Pres. and Organizer, Aero Club of Southern California; Aero Club of America.

Present Occupation: Retired.

Address: 5703 Sunset Boulevard, Hollywood, Los Angeles, Calif.

Frank Benjamin Tyndall

TYNDALL, FRANK BENJAMIN, 1st Lieut., Air Service; born, Sewells Point, Fla., Sept. 28, 1894; son of Edward C. B. Tyndall and Marion (Hogg) Tyndall.

Educated: Peacock School for Boys, Atlanta, Ga.; Valparaiso University, Valparaiso, Ind.

Professional: Co. L., 2nd Fla. Infantry, Federal Service on Mexican Border, June 1916 to March 1917; 3rd Battery, 1st O.T.C., Ft. McPherson, Ga.

Aeronautical Activities: S.M.A., Georgia Tech., 1917; primary training at Chateauroux, France, Dec. 1917 to March 1918; commissioned 1st Lieut., April 1918; advanced training at Issoudun; School of Aerial Gunnery at Cazaux, France; 49th Aero Squadron, 2nd Pursuit Group, Aug. 1918; Flight Commander, 22nd Aero Squadron, 2nd Pursuit Group, Oct. 1918 to April 1919; promoted to Captain, March 1919; Operations Officer, 1st Pursuit Group, Oct. 1919 to Jan. 1920; C.O. 147 Pursuit Squadron, Jan. to June 1920; C.O. Air Park Group, June to Oct. 1920, Operations Officer, 1st Wing, Aug. 1920 to Oct. 1920; Engineering School, McCook Field, Nov. 1920 to Aug. 1921.

Flying Rating: Brevet Militaire, March 1918; Pursuit Pilot, July 1918.

War Service: Army, May 1917 to Armistice; Toul Defense, St. Mihiel, Meuse-Argonne Offensives.

War Honors: Four official victories; citation from General Pershing.

Member: Aero Club of America; University Club (Seattle, Wash.).

Present Occupation: 1st Lieut., Air Service.

Address: Boeing Airplane Co., Seattle, Wash.; home, P. O. Box 117, West Palm Beach, Fla.

Ralph Hazlett Upson

UPSON, RALPH HAZLETT, Aeronautical Engineer, born New York City, June 28, 1888; Son of William F. Upson and Grace (Hazlett) Upson; married Frances Allen, May 19, 1915.

Educated: public schools Glen Ridge, N. J.; M. E. Steven's Institute of Technology, 1910.

Professional: Aeronautic Experimental Engineering, Automobile tire research work, started Education and Safety First departments, technical supervision of all new inventions, member factory suggestion committee, Goodyear Tire and Rubber Co., Akron, Ohio; Chief Engineer, Goodyear Aeronautical Dept., 1915-1920; writer on aeronautical subjects.

Aeronautical Activities: Made first balloon flight 1906; assisted Aerial Experiment Association, Hammondsport, N. Y., 1908; Aerodynamic research work, 1909; Aeronautic Sales Department Goodyear Tire and Rubber Co., 1910-1911; Construction Foreman for Vaniman Airship Envelope, 1911; Designed and built first complete balloon, 1912; Commenced experimental study of airship engineering, introduced system of

water model testing, 1912; Organized Goodyear Aero Club, 1913; won National and International Balloon Races, 1913; started lighter-than-air training for U. S. Navy 1914; designed first improved kite balloon 1915; developed lighter-than-air war construction at Goodyear, principally kite balloons and Navy airships 1917; started Wing-foot Lake Flying School 1917; flew first Navy coast patrol ship Chicago to Akron in demonstration flight 1917; Member of Navy design mission in Europe 1918-1919; won National Balloon Race 1919; further study of European methods 1920; won National Balloon Race 1921.

Flying Rating: Pilot's certificates, Balloon and Airship, F.A.I.

Member: Aero Club of America, Society of Automotive Engineers, American Meteorological Society; Royal Aeronautical Society (Eng.); National Press Club; Ohio Society of New York.

Present Occupation: Consulting Engineer; Contributing Editor, "Aviation".

Address: 606 Penobscot Bldg., Detroit, Mich.



Ralph Upson

Kenneth Russell Unger

UNGER, KENNETH RUSSELL, Pilot, Air Mail Service; born, Newark, N. J., April 19, 1898; son of Eugene Unger and A. W. (Osmun) Unger; married, Lois Whittaker, May 27, 1919.

Educated: Montclair Academy.

Professional: Army, 1917-1919; fruit buyer, western canning company, 1919-1920; commercial aviation, California, Sept. 1920, Air Mail Service.

Aeronautical Activities: University Toronto Ground School, June 1917; Fort Worth, Tex. Instructor, Nov. 1917; France, April 1918 to end of war with 210th Squadron, R.A.F.; 1920, commercial aviation; Sept. 1920, Air Mail Service; (first pilot to carry passengers in and out of Yosemite National Park, Calif.)

Flying Rating: 1st Lieut. R.A.F. Pilot; Aero Club of America Certificate No. 1356.

War Service: Turned down in U. S. and enlisted in R.A.F., June 1917 to April 1919.

War Honors: Distinguished Flying Cross, Nov. 17, 1918; officially credited with destruction of ten enemy planes and one captive observation balloon.

Member: Air Mail Pilots of America.

Present Occupation: Pilot, Air Mail Service.

Address: Air Mail Service; home, Belvedere Apts., Salt Lake City, Utah.

Claire K. Vance

VANCE, CLAIRE K., Air Mail Pilot; born, Logansport, Ind., June 30, 1897; son of Elmer J. Vance and Martha E. Vance.

Educated: Logansport High School; University of Illinois.

Aeronautical Activities: Enlisted A.S.S.C. Feb. 1917; oversaw Dec. 1917 to April 1919; Instructor at Tours after flying photography over the American Lines for historical purposes; operating own plane, 1919; Air Mail Pilot, April to Aug. 1920; operating own plane, Aug. 1920 to Feb. 1921; Air Mail Pilot to date.

Flying Rating: R.M.A., Oct. 13, 1917.

Member: Aero Club of America; Air Mail Pilots Association of America.

Present Occupation: Air Mail Pilot.

Address: c/o Air Mail, Reno, Nev.

Earl Talmadge Vance

VANCE, EARL TALMADGE, Commercial Aviator; born, Washington, Ind., Jan. 13, 1896; son of Warren Perry Vance and Jennie (Jacobs) Vance.

Educated: High school; Graduate Accountant and Stenographer.

Professional: 1916-1917, office manager for Construction Company in Aberdeen, S. D.; manager of rice plantation in Louisiana one summer; commercial flying for year and half.

Aeronautical Activities: Transferred from 19th U. S. Inf. to Ground School, Austin, Tex., Dec. 8, 1917; completed 8 weeks Course, Feb. 2, 1918; ordered to Love Field, Dallas Tex.; commissioned 2nd Lieut., Reserve Military Aviator, with Pursuit Rating and made Flying Instructor, May 8, 1918; ordered to Payne Field, Miss., June 3, 1918 and instructed in flying until made Ass't. Officer in Charge of Flying; discharged, April 1919; later, commissioned 1st Lieut. Air Service Reserve.

Flying Rating: Reserve Military Aviator.

War Service: U. S. Infantry, May 25, 1917 to Dec. 8, 1917; transferred to Air Service.

Member: Texas Aero Club.

Present Occupation: Commercial flying; Manager Aero Miles City Club, Miles City, Mont.

Address: Care of Chamber of Commerce; home, Erickson Apartments, No. 5, Miles City, Mont.

S. L. Van Meter, Jr.

VAN METER, S. L., JR., Capt., Air Service; born, Fayette County, Ky., April 8, 1888; son of Solomon Lee Van Meter and Evelyn Trent (Swoope) Van Meter.

Educated: Kentucky University; Oxford University.

Aeronautical Activities: Commissioned 1st Lieut., A.S., S. C., Nov. 1917; Experimental Section, Engineering Department, Kelly Field to Sept. 21, 1918; parachute experimental work at Wilbur Wright and McCook Fields until Jan. 1919; Engineering Dept., Kelly Field, Jan.-July 1919; Engineer Officer, Kelly Field from July 1919 to May 1921; ordered to Langley Field for bombing tests on ex-German ships, May 1921; inventor of parachute pack and parachute release for airplanes.

Flying Rating: Reserve Military Aviator; Airplane Pilot.

Present Occupation: Captain, Air Service.

Address: Kelly Field, Tex. home, Lexington, Ky.

Carl Condit Van Ness

VAN NESS, CARL CONDIT, Broker; born, Newark, N. J., Oct. 9, 1894; son of Wallace Van Ness and Anne (Waldron) Van Ness.

Educated: 1905-1912, Newark Academy; A. B. 1916, Columbia University.

Professional: Newspaper man 1916-1920; Cotton Cloth Broker, 1920-1921.

Aeronautical Activities: S.M.A. Austin, Tex., Gerstner Field, La., Post Field, Okla.; 2nd Lieut., Air Service, Aug. 1918; 1st Lieut., Air Service, Signal Reserve Corps, March 1919.

War Service: Enlisted, May 10, 1916; discharged, Jan. 1919.

Member: Sons of the American Revolution; Holland Society of New York.

Present Occupation: Cotton Cloth Broker.

Address: 4 Cedar St., N. Y.; home, 121 Mt. Pleasant Ave., Newark, N. J.

Ward Tunte Van Orman

VAN ORMAN, WARD TUNTE, Aeronautical Engineer; born, Lorain, Ohio, Sept. 2, 1894; son of Richmond G. Van Orman and Christina T. Van Orman; married, Edith L. Black, April 13, 1918.

Educated: Public schools of Lorain, Ohio; B.S. 1917, Case School of Applied Science.

Aeronautical Activities: Motor instructor, Naval Air Station, 1917-1918; Dirigible and Free Balloon instructor, Naval Air Station, 1918-1919; Aeronautical Engineer, Goodyear Tire & Rubber Co., 1919 to date.

Flying Rating: Aero Club Spherical Balloon Pilot License No. 392; Dirigible License No. 77

Present Occupation: Aeronautical Engineer.

Address: Goodyear Tire & Rubber Co.; home, 509 Crosby Ave., Akron, Ohio.

George A. Vaughn, Jr.

VAUGHN, GEORGE A. JR., Engineer; born, Brooklyn, N. Y., May 20, 1896; son of George A. Vaughn, Sr. and Grace (Sours) Vaughn.

Educated: Adelphi Academy, Brooklyn, N. Y.; B.S. 1919, Princeton.

Aeronautical Activities: Princeton S.M.A., July 1917; S.M.A., Oxford, England, Sept. 1917; flying training at various schools in England; commissioned 2nd Lieut., 1st Lieut., and Captain during service; ferry pilot between England and France, 1918; active service at the front with 84th

Squadron, R.A.F.; joined 17th American Aero Squadron as Flight Commander (Cambrai Sector); moved south to Toul Sector in Nov. 1918.

Flying Rating: Reserve Military Aviator, March 1918; Junior Military Aviator, Feb. 1919.

War Service: As above.

War Honors: Distinguished Service Cross; four citations; Distinguished Flying Cross; officially credited with having destroyed thirteen enemy planes.

Member: Princeton Club; New York Flying Corps; Princeton Engineering Association.

Present Occupation: Engineer, Western Electric Co.

Address: 463 West St., New York City; home, 441 Washington Ave., Brooklyn, N. Y.

Raymond Edward Vaughan

VAUGHAN, RAYMOND EDWARD, Captain, Air Service; born, Jasper, Minn., Jan. 20, 1893; son of Lorenzo M. Vaughan and Anna (York) Vaughan; married, Marguerite E. Martinette, Aug. 11, 1918.

Educated: Public and high schools of Jasper, Minn.

Professional: Publisher of Iowa weekly newspaper 1909 to 1912; U. S. Navy from 1913 to 1917, specializing in radio telegraphy and telephony at Arlington.

Aeronautical Activities: U. S. Air Service since July 1917; Instructor at School for Aerial Observers, Fort Sill, Okla., Sept. 1917 to Jan. 1918; overseas, Jan. to Aug. 1918; engaged in radio engineering and research in England and France, specializing in radio navigation for night bombardment airplanes; returned to U. S. in Aug. 1918 to open schools for training radio navigators and operators for night bombardment airplanes, also to help place radio navigating apparatus into production; Langley Field, Dec. 1918 to March 1919; Engineering Division, McCook Field, April 1919 to date.

Flying Rating: Airplane Observer, Nov. 7, 1917.

War Service: U. S. Navy, April to July 1917; Air Service, July 1917 to date.

Present Occupation: Captain, Air Service; Chief, Radio Branch, Engineering Division, McCook Field.

Address: McCook Field, Dayton, Ohio.

Walter W. Vautsmeier

VAUTSMEIER, WALTER W., Major, Air Service; born, Freeport, Ill., June 21, 1886; son of Conrad F. Vautsmeier and Mary Vautsmeier.

Educated: Freeport High School; University of Illinois; U. S. Military Academy.

Professional: Commissioned 2nd Lt. Coast Artillery Corps, June 15, 1910; 1st Lt., July 1, 1916; Capt., Aviation Section Signal Corps, May 15, 1917; Major (temporary) Signal Corps, Feb. 11, 1918; Major (permanent) Coast Artillery Corps, July 1, 1920; detailed Major, Air Service, July 1, 1920, to date.

Aeronautical Activities: detailed for aeronautical training at North Island, Calif., Jan. 1915; trained until Aug. 19, 1920; served with Air Service since June 12, 1917.

Flying Rating: Reserve Military Aviator Nov. 18, 1918; Airplane Pilot, Jan. 17, 1921; Free Balloon Pilot Sept. 18, 1918; Balloon Observer Sept. 24, 1921.

Member: American Legion; Alamo Post, San Antonio, Tex.; Pensacola Consistory No. 3, Abba Temple, Mobile, Ala.

Present Occupation: Lighter-than-air duty, Ross Field, Arcadia, Calif.

Address: Ross Field, Arcadia, Calif.

Victor Vernon

VERNON, VICTOR, Commercial Pilot; born, Rome, Italy, Oct. 1, 1883; son of Leroy M. Vernon and Emily Parker Vernon; married, Charlotte E. Clay, May 18, 1911.

Professional: U. S. Army, 1902-1905; Office appliance salesman and district manager, various companies, 1906-1910; operated automobile agency, 1911-1913.

Aeronautical Activities: Flying training, bought and operated Curtiss F boat, 1913-1915; trained Canadians, Toronto, Canada, 1915; same, Newport News, 1915-1916; Chief Flying Instructor, Army, 1916-1918; inaugurated instructor's school, Gerstner Field; commissioned Lieut., U. S. N. R. F., April 21, 1918; experimental and test piloting for Navy at Washington and Philadelphia, April 1918 to May 1919; in charge of flying operations, Curtiss Corp., June 1919 to Dec. 1919; Oregon, Washington & Idaho Airplane Co., Dec. 1919 to date.

War Service: April 6, 1917 to Nov. 11, 1918.

Member: Aero Club of America; Aero Club of Oregon.

Present Occupation: Manager, Oregon, Washington & Idaho Airplane Co.

Address: 214 Spaulding Bldg., Portland, Ore.; home, Oswego, Ore.

George Washington Vest

VEST, GEORGE WASHINGTON, Sr. Law Student and Accountant; born, Buckner, Mo., Aug.

26, 1894; son of Henry B. Vest and Jennie L. Vest.

Educated: Public schools of Buckner, Mo.; Highland Park College, 1914-1916; Drake University, 1919-1921.

Aeronautical Activities: Graduated School Military Aeronautics, University of Texas; Park Field School of Aviation, Millington, Tenn.; Kelly Field.

Flying Rating: Reserve Military Aviator; Pursuit Pilot.

War Service: Army, Dec. 1917 to March 1919.

Member: Aero Club of America.

Present Occupation: Sr. Law Student and Accountant, Drake University.

Address: 7th University St.; home, 1204-24th St., Des Moines, Iowa.



Jesse G. Vincent

Claud E. Vick

VICK, CLAUD E., Sup't of Schools, Joppa, Ill.; born, Olive Branch, Ill., Aug. 2, 1891; son of C. C. Vick and Josephine (Coakley) Vick.

Educated: Public schools, Olive Branch, Ill.; Southern Illinois State Normal; Junior College.

Professional: Teacher.

Aeronautical Activities: Ground School, Urbana, Ill., 1918; Scott Field, 1918.

Flying Rating: Reserve Military Aviator, Dec. 7, 1918.

War Service: Army Air Service, 1917-1918.

Present Occupation: Sup't of Schools.

Address: Joppa; home, Olive Branch, Ill.

Carl Vincent Vickery

VICKERY, CARL VINCENT, Agriculturist; born, Nov. 4, 1896; son of Fred A. Vickery and Hattie (Nearhood) Vickery; married, Mary Razor, Oct. 16, 1920.

Educated: Grammar and high schools of Bellevue, Ohio; agricultural course at Ohio State University.

Professional: Since 1918 Farm management.

Aeronautical Activities: Ground work at University of Illinois; training at Barron Field.

Flying Rating: Reserve Military Aviator.

War Service: Dec. 27, 1917 to Dec. 13, 1918.

Member: Cleveland Aviation Club; American Legion.

Present Occupation: Farm Manager and livestock breeder.

Address: R. F. D. 7, Bellevue, Ohio.

John Francis Victory

VICTORY, JOHN FRANCIS, Government Service; born, New York City, Jan. 23, 1892; son of John Francis Victory and Ellen (Hines) Victory; married, Marie Frances Brennan, Oct. 17, 1917.

Educated: Grammar school and Business High School, Washington, D. C.; Georgetown University Law School.

Professional: Shorthand reporter, Congressional committees, courts, and conventions; proprietor and instructor, Success Shorthand School of Washington, 1913-1917.

Aeronautical Activities: First flight in 1913 while secretary to Naval Constructor, H. C. Richardson, U. S. N.; employed by National Advisory

Committee for Aeronautics in June 1915, being its first, and for over a year its only employee; organized the committee's first staff and the details of its financial and administrative procedure; became Assistant Secretary of the committee in 1917 and organized its "Office of Aeronautical Intelligence" in 1918.

Present Occupation: Assistant Secretary and Disbursing Officer, National Advisory Committee for Aeronautics.

Address: 2723 Navy Bldg.; home, 102 The Argyle, Washington, D. C.

Jesse Gurney Vincent

VINCENT, JESSE GURNEY, Vice-President of Engineering, Packard Motor Car Co. Detroit; born, Charleston, Ark., Feb. 10, 1880; son of Joseph M. Vincent and Nellie (Gurney) Vincent; married, Clarinda Blood, Oct. 2, 1902.

Educated: Country school near Pana, Ill.; Cote prilliant Grammar School, St. Louis, Mo.; Graduating Mechanical Engineering, International Correspondence School.

Professional: 1897-1898, Bookkeeping and General Business, Smith, Vincent & Co.; 1898-1902, Machinist & Toolmaker, St. Louis; 1903-1910, Supt. of Inventions, Burroughs Adding Machine Co., Detroit; 1910-1912, Chief Engineer Hudson Motor Car Co., Detroit; 1912-1917, Vice-President of Engineering, Packard Motor Car Co.; U. S. Air Service, Aug. 1917 to Nov. 1918; Packard Motor Car Co., Vice-President of Engineering, 1919-1921.

Aeronautical Activities: Aug. 15, 1917, commissioned Major in Signal Corps; Accepted Sept. 4, 1917; Oct. 17, 1917, started to build experimental aircraft engineering station at McCook Field, Dayton; placed in Command of McCook Field, Feb. 7, 1918; announced as Reserve Military Aviator, Aug. 8, 1918; designated Chief of Airplane Engineering Division with title of "Chief of Engineering," Sept. 13, 1918; detailed as member of Joint Army and Navy Technical Aircraft Board, Special Order Dated Nov. 5, 1918; designed with E. G. Hall the Liberty Engine.

Flying Rating: Colonel, Aviation Section (Flying Status) Signal Officers' Reserve Corps, U. S. Army.

Member: Aviation Country Club; Detroit Club; Detroit Board of Commerce; Old Club; Society of Automotive Engineers; American Society of Mechanical Engineers; Institute of Automobile Engineers (London); Aero Club of America.

Present Occupation: Vice-President of Engineering; Packard Motor Car Co., Detroit.

Address: E. Grand Blvd., Detroit, Mich.; home, 528 E. Grand Blvd., Detroit, Mich.

Chance Milton Vought

VOUGHT, CHANCE MILTON, Consulting Engineer; born, New York City, Feb. 26, 1888; son of George W. Vought and Annie (Colley) Vought; married, Ena Lewis, Dec. 4, 1920.

Educated: Public schools of New York City; Pratt Institute, Brooklyn, N. Y.; New York University; University of Pennsylvania.

Professional: Consulting Engineer to Harold F. McCormick, Chicago, Ill. and San Antonio, Tex., 1909-1912; Consulting Engineer, Aero Club of Illinois, 1912-1913; Aeronautical Engineer and Pilot, Lillie Aviation School, 1913; Technical Editor and Editor, Aero & Hydro Aviation Weekly, 1914; Aeronautical Engineer, Mayo Radiator Works, 1914-1915; Designing Engineer, Curtiss Airplane & Motor Corp., 1915-1916; Aeronautical Engineer and Designer, The Wright-Martin Aircraft Corp., New York City, 1916-1917; Consulting Engineer and Chairman of the Board, Lewis and Vought Corp., 1917 to date.

Aeronautical Activities: Active pilot, 1911-1917; designer and constructor of PLV Biplane, Mayo Biplane, Simplex 3-Place Flying Boat, Wright Model "V" Military Biplane, Wright-Hispano Flying Boat, Vought VE-7 Standardized Military Training Biplane, VE-8 Single Seater Pursuit Plane, VE-10 Short Hull Type Flying Boat, VE7SF, Navy Standard Ship's Turret Plane, VE9 Advanced Training Airplane VE11 Special Pursuit Single Seater, 1910-1921.

Flying Rating: International Aircraft Pilot's License No. 156 Ae.C.A., 1912.

War Service: Consulting Engineer, Bureau of Aircraft Production, Washington, D. C.

Books: Treatises on Aircraft Design and Performance, 1912.

Member: Aero Club of America; Racquet Club; Society of Automotive Engineers.

Present Occupation: Consulting Engineer, Lewis & Vought Corp.

Address: Review and Borden Aves., Long Island City; home, 440 Park Ave., New York City.

Leigh Wade

WADE, LEIGH, 1st Lieut., Air Service; born, Cassopolis, Mich., Feb. 2, 1896; son of William Murry Wade and Mary Jane Francis (Tharp) Wade.

Educated: Public and high schools of Cassopolis, Mich.; LaSalle Extension University.

Aeronautical Activities: July to Dec. 1917, Cadet, U. S. Army, attached to Royal Flying Corps, Toronto, Canada; instructor, 3rd A.I.C., A. E. F., March 1918 to Aug. 1918; Technical Section, Air Service, Headquarters, Paris, France, Aug. 1918 to July 1919; Test Pilot, McCook Field, Aug. 1919 to date; pilot on White Mountain Photographic Mission, Aug. 13 to Oct. 22, 1921.

Flying Rating: Airplane Pilot.

War Service: As above.

Member: Dayton City Club; Aero Club of Michigan.

Present Occupation: Chief, Test Branch, Flying Section, Engineering Division, Air Service.

Address: McCook Field; home, 416 West 2nd St., Dayton, Ohio.

George Reed Wadsworth

WADSWORTH, GEORGE REED, Consulting Engineer; born, Keene, N. H., Aug. 22, 1875; son of Samuel Wadsworth and Ella Frances (Reed) Wadsworth; married, Alice Marion Randie, April 9, 1902.

Education: Keene, N. H. High School, B. S. in Civil Engineering, 1898, Massachusetts Institute of Technology.

Professional: 1898-1905 with New York Central Railroad, Maintenance of Way Dept., designing Engineer and Resident Engineer on Grand Central Terminal Improvements; 1905-1907 with J. G. White & Co. Inc., N. Y., Engineer on contract work, Steam and Electric Railroad Construction, Hydro-Electric and Harbor Development; 1907-1909, Consulting Engineer to Metropolitan Improvements Commission, Boston, Mass., rendered report to Commission, embodied in Commission's report to The Commonwealth covering complete Unification and Operation under joint control, of all passenger and freight steam railroad terminal properties and facilities within the Boston Terminal District, covering also proposed development of Boston Harbor to provide additional waterfront facilities; 1909-1910 Consulting Engineer on Terminal Transportation and allied problems in connection with city planning; 1910-1913 Engineering Manager and Chief Engineer, Peerless Motor Car Co., Cleveland, Ohio; 1913-1916 Assistant to the President, Gray & Davis Inc., Boston, Manufacturers of automotive starting & lighting equipment.

Aeronautical Activities: April, 1917, civilian appointment, Aviation Section S. C., U. S. A.; commissioned Captain, June 1917; Major, Oct. 1917 to Oct. 1918; Chief Engineer Naval Aircraft Factory, Navy Yard, Philadelphia, Pa.; Dec. 30, 1918, Honorably Discharged.

Member: American Society of Civil Engineers; American Society of Mechanical Engineers; Society Automotive Engineers; University, Engineers, Technology and Aero Club of America (N. Y.).

Present Occupation: Consulting Engineer.

Address: 32 West 40th St., New York; home, 83 West 67th St., New York.

Charles Doolittle Walcott

WALCOTT, CHARLES DOOLITTLE, Scientist; born, New York Mills, N. Y., March 31, 1850; son of Charles D. Walcott and Mary (Lane) Walcott; married, Mary Morris Vaux, June 30, 1914.

Education: Public schools, Utica, N. Y.; LL.D. 1897, Hamilton; 1901, University of Chicago; 1902, Johns Hopkins; 1903, University of Pennsylvania; 1910, Yale; 1911, St. Andrews; Sc.



George Reed Wadsworth



Charles D. Walcott

D. 1909, University of Cambridge, England; 1913, Harvard.

Professional: Geological research, New York State Survey 1876, U. S. Geological Survey, 1879, director, 1894-1907; head of National Museum and Secretary, Smithsonian Institution since 1907.

Aeronautical Activities: As successor to Samuel Pierpont Langley, conducted experiments with Glenn H. Curtiss at Hammondsport, 1914, with the Langley aerodrome, Chairman, National Advisory Committee for Aeronautics.

Present Occupation: Secretary, Smithsonian Institution.

Address: Smithsonian Institution; home, 1743-22nd St., Washington, D. C.

Sidney Dunn Waldon

WALDON, SIDNEY DUNN, Engineer; born, London, England, Jan. 29, 1873; son of James Ley Waldon and Julia (Dunn) Waldon; married, Lois Strong Burton, Oct. 20, 1898.

Education: London Public School; South Kensington Science and Arts.

Professional: Fobbs-Hart & Co., London; trade as locksmith; Cooper Engine Co. and Mount Vernon Bridge Co., Mount Vernon, Ohio, 1893 to 1895; Ball Eng. Co., Erie, Pa., 1896-1900; Foster Auto Co. Rochester, 1900-1902; Packard Motor Car Co., 1902-1915; Cadillac Motor Car Co., 1915-1916.

Aeronautical Activities: Charter member, Aero Club of Michigan and President during later years; helped buy plane and train Michigan National Guardsmen at Grayling, Mich., during 1916; flew as passenger first time in Wright plane, 1910, also started ballooning same year.

War Service: Army, enlisted Dec. 1916; Capt. Aviation Section Signal Corps, Feb. 19, 1917; member first Aircraft Production Board; Col. Air Service, Aug. 26, 1917; Overseas, Oct. 1917 to Feb. 1918; discharged Dec. 12, 1919.

Member: Aviation Country Club; member, advisory board for aviation, Detroit; Chairman, Aeronautical Com. Board of commerce; President, Detroit Aviation Society, Inc., organizing Pulitzer and other trophy races in Detroit, Sept. 8-9-10, 1921.

Present Occupation: Engineering.

Address: 4612 Woodward Ave., Detroit, Mich.; home, 160 Longfellow Ave., Detroit, Mich.

Joseph Lemuel Walker

WALKER, JOSEPH, LEMUEL, Commercial Aviator; born, Oakland City, Ind., Aug. 20, 1895; son of Patrick E. Walker and Mary R. Walker.

Education: Public schools of Oakland City; Aeronautical Engineering, 1920, Chicago Tech.

Professional: Automobile business from 1912 to 1917.

Aeronautical Activities: Started instruction at Tours, France, May 1918; Engineer Officer at Romorantin, France, Sept. 1918 to Jan. 1919; flew Forest Patrol with 91st Aero Squadron also Mexican Border Patrol, 1920.

Flying Rating: Airplane Pilot.

War Service: Air Service, March 1917 to Oct. 1920.

Present Occupation: Manager, O'Neal-Walker Aerial Service.

Address: Box 63; home, 618 Sherman Street, Oakland City, Ind.

Thomas Walkup

WALKUP, THOMAS, Oil Business; born, July 24, 1871; son of Thomas Walkup and Celinda (Deitz) Walkup; married, Fairfax Proudft, Feb. 9, 1919.

Education: Chicago High Schools; three years, Mass. Inst. of Tech.

Professional: Banker and broker, New York City until 1912; oil business since that date, operating in Kansas, Wyoming and Montana.

Aeronautical Activities: President, Aviation Examining Board, Memphis, Tenn., Sept. 25, 1917 to Feb. 28, 1918; Columbus, Ohio S.M.A. for training, 1918; President, St. Louis Aviation Examining Board, May 1918 to Jan. 1919; flying at Scott Field, Eberts Field and Park Field; Chief of A. and A. Div., War Risk, Washington, D. C.

War Service: Commissioned Capt. A.S.S. Corp., Sept. 1917; commissioned Major, A.S.S.O. R.C., Feb. 1919.

Member: Billings Commercial Club; Empire State Soc. Sons of Amer. Rev.; Memphis Chamber of Commerce.

Present Occupation: Oil business.

Address: Billings, Mont.; home, 350 N. Bellevue Ave., Memphis, Tenn.

Leo Andrew Walton

WALTON, LEO ANDREW, Major, Air Service; born, Salem, Ore., Oct. 7, 1890; son of James Walton and Mary E. Walton; married, Frede A. Koch, Jan. 29, 1919.

Education: East Salem Grade School; Salem High School; Willamette University.

Professional: Banking business before joining army.

Aeronautical Activities: Training at Kelly, Cal. and Brooks Fields; Staff of District Supervisor, Nov. 1919; Langley Field, Nov. 1920 to date.

Flying Rating: Junior Military Aviator, July 1917; Airplane Pilot.

War Service: Cadet, 1911-1915; 10th Cavalry, 1915-1916; Air Service, 1916 to date; service in Mexico in 1916.

Present Occupation: C. O. 1st Prov. Bombing Group.

Address: Langley Field, Va.; home, 1077 Center St., Salem, Ore.

Raymond Ware

WARE, RAYMOND, Commercial Aviation; born, Boston, Mass., June 13, 1883; son of William M. Ware and Florence (Brewer) Ware; married, Catherine Munro Schurman, July 12, 1919.

Education: Edward Everett; Mechanic Arts High School; 1907, Naval Architecture, Mass. Inst. of Tech.

Professional: B. F. Sturtevant Co.; Hayden, Stone & Co.; Thomas-Aeromotor Co.; Thomas Bros. Aeroplane Co., 1915-1917; Thomas-Morse Aircraft Corp., 1917 to present.

Aeronautical Activities: Secretary, Thomas Aeromotor Co.; General Sales Representative,



Sydney D. Waldon

Thomas Bros. Aeroplane Co.; Secretary, Thomas-Morse Aircraft Corp.
 Member: Society of Automotive Engineers.
 Present Occupation: Secretary, Thomas-Morse Aircraft Corp.
 Address: Heights Court Apt., Ithaca, N. Y.

Edward Pearson Warner

WARNER, EDWARD PEARSON, Aeronautical Engineer; born, Pittsburgh, Pa., Nov. 9, 1894; son of Robert L. Warner and Anne (Pearson) Warner.

Educated: Yolkmann School, Boston; A. B. 1916, B. S. 1917, Harvard University; B. S. 1917, M. S. 1919, Mass. Inst. of Tech.

Aeronautical Activities: Engaged in aeronautical work continuously since 1916; Assistant at M. I. T. 1917; Instructor at M. I. T. 1918, giving most of the aeronautical work in the special Army and Navy schools in aeronautical engineering; Aero Engineer, U. S. Army, doing wind tunnel work and miscellaneous investigations in stability and stress analysis, 1917-1918; 1919-1920, Chief Physicist, National Advisory Committee for Aeronautics; in charge of aeronautical research at Langley Field; Secretary, Committee on Aerodynamics, N. A. C. A., 1919 to date; Associate Professor in Aeronautics, Mass. Inst. of Tech., 1920 to date.

War Service: Aeronautical Engineer, U. S. Air Service.

Books: Reports No. 17, 20, 71, 72, 73, 76, 92, and 96; Technical Notes No. 1, 3, 4, and 6, National Advisory Committee for Aeronautics, also numerous magazine articles and papers reprinted in the transactions of societies. These reports deal chiefly with stability, stress analysis and free flight testing.

Member: Associate Fellow, Royal Aeronautical Society; Junior S. A. E.; American Society of Mechanical Engineers; Fellow, American Physical Society; American Association for Advancement of Science; Junior member, Society Naval Architects and Marine Engineers; Aero Club of America.
 Present Occupation: Consulting aeronautical engineer.

Address: Mass. Inst. of Tech., Cambridge, Mass.

Herbert Ray Warner

WARNER, HERBERT RAY, Real Estate; born, Wayne Co., Mich., Oct. 3, 1894; son of Ammon B. Warner and Ella Warner.

Educated: Plymouth High School; Michigan Agricultural College.

Aeronautical Activities: Training as night bomber at Pensacola, Fla. and Miami, Fla.; active duty at Northern Bombing Group, France and at U. S. Naval Air Station, Mouchio-Lacanau, France.

Flying Rating: Naval Aviator No. 732.

War Service: Navy, Feb. 1918 to Jan. 1919.

Present Occupation: Building and Real Estate.

Address: Kalamazoo, Mich.

John A. Carpenter Warner

WARNER, JOHN A. CARPENTER, Engineer; born, Putnam, Conn., July 12, 1893; son of Edgar Morris Warner and Jane E. (Carpenter) Warner; married, Marion W. Andem, March 25, 1920.

Educated: Public Schools, Putnam, Connecticut; Worcester Polytechnic Institute, B. S. in Mechanical Engineering, 1917; Ecole supérieure d'Aeronautique et de Construction Mécanique, Paris, France, 1919.

Professional: Materials Testing, Bureau of Standards, 1917, and as noted below.

Aeronautical Activities: Testing of Aircraft Materials, Bureau of Standards, 1917; Member, Technical Section, Aircraft Instrument Division, U. S. Air Service, Paris, France, 1918-1919; Executive Officer, Aeronautic Instruments Section, Bureau of Standards, Washington, D. C., 1920-1922; Aeronautical Representative, Bureau of Standards, in Great Britain and Europe, 1921.

War Service: United States Air Service, October 1917 to July 1919; A. E. F., December 1917 to June 1919; Rank, 2nd. Lieutenant.

Publications: Reports on "Aeronautic Instruments," National Advisory Committee for Aeronautics Publications.

Present Occupation: Executive Officer, Aeronautic Instruments Section, Bureau of Standards, Washington, D. C.

Address: 1357 Monroe Street, Washington, D. C.

Carlyle Hilton Wash

WASH, CARLYLE HILTON, Major, Air Service; born, Minneapolis, Minn., Oct. 15, 1889; son of James A. Wash and Mrs. James A. Wash; married, Constance Rogers, May 14, 1919.

Educated: University of Minnesota; U. S. Military Academy.

Professional: 2nd Lieut., 1st Lieut., and Capt., 6th U. S. Cavalry; border service, Pershing's Mexican Campaign, 1916.

Aeronautical Activities: Started flying Sept. 1, 1917, Rockwell Field, San Diego, Calif., continuous flying duty to date; Chief of Experimental Flying Section; Engineering Division Air Service.
 Flying Rating: Junior Military Aviator, Dec. 13, 1917.

War Service: Organized and commanded Southern Field, Americus, Ga., throughout war.

Member: Aero Club of America; Army and Navy Club (Washington); Dayton Country Club; Miami Valley Hunt and Polo Club.

Present Occupation: Student Officer, Air Service Engineering School, M. Cook Field.

Address: McCook Field; home, 823 Far Hills Ave., Dayton, Ohio.

Francis Bentley Waterman

WATERMAN, FRANCIS BENTLEY, Ensign, U. S. N. R. F. C.; born, Selma, Calif., Feb. 21, 1897; son of Edward B. Waterman and Ida B. (Francisco) Waterman.

Educated: Elementary and high schools, Fresno, Calif.; A. B. 1919, University of California.

Professional: Sept. 1919 to Dec. 1920, highway construction in Nevada, with State Highway Department and Pitt-Taylor Syndicate, a contracting firm.

Aeronautical Activities: March 1918, enlisted Naval Aviation; Ground School at M. I. T., Cambridge, Mass.; Air Stations, Key West, Miami, Pensacola.

Flying Rating: Naval Aviator No. 1821; Aero Club of America, Hydroaeroplane Pilot No. 415.

Present Occupation: Graduate Student, University of California.

Address: Box 185, Berkeley, Calif.

George Hudson Watkins

WATKINS, GEORGE HUDSON, born, Auburn-dale, Fla., April 7, 1886; son of Thomas B. Watkins and Rachel Watkins.

Educated: Public schools; Rindge Technical School, Cambridge, Mass.

Professional: Auto repairing, driving, and testing since 1906.

Aeronautical Activities: 1912, tested pontoons in New Orleans; U. S. Air Service; exhibition flying and passenger carrying since service in the army.

Flying Rating: Reserve Military Aviator.

War Service: M. I. T. Ground School, Dec. 1917; transferred to Aviation Section and sent to Camp Dick; trained at Taliaferro Field and El-lington Field.

Present Occupation: Auto demonstration and flying.

Address: 700 Commonwealth Ave., Boston, Mass.; home, 7 Story St., Cambridge, Mass.

Henry Lee Watson

WATSON, HENRY LEE, Major, Air Service; born, Hartford, Conn., Nov. 25, 1883; son of John Henry Watson and Susan M. (Hoffman) Watson; married, Eleanor F. Ewing, Oct. 30, 1912.

Educated: Various private schools in Hartford, Conn., New York, N. Y., and Florence, Italy; 1901 to 1903, Trinity College; 1907, U. S. Military Academy.

Professional: 2nd Lieut., 1st Lieut. and Captain of Cavalry, June 1907 to Oct. 1917; Major, A. S. S. C., Oct. 1917 to Aug. 1918; Lt. Col. Air Service, Aug. 1918 to Feb. 1920; Major, Air Service, Feb. 1920 to date.

Aeronautical Activities: Flying training at Rockwell Field, Calif., March to Oct. 1918; piloted with first party to fly across the Sierra Nevada, March 22, 1919; commanded in turn, Chanute Field, Ill., Nov. 1918 to Jan. 1919, Mather Field, Calif., Jan. to July 1919, March Field, Calif., July to Aug. 1919, Rockwell Field, Calif., Aug. 1919 to March 1920, Mather Field, Calif., April to July 1920.

Flying Rating: Junior Military Aviator, Sept. 3, 1918; Airplane Pilot, Oct. 5, 1920.

Member: Army and Navy Club, Manila, P. I.; Army and Navy Club, Washington, D. C.; Army and Navy Club, New York, N. Y.; St. Anthony Club (N. Y.).

Present Occupation: Air Service Officer, Governor's Island, N. Y.

Stanley Hamer Weaver

WEAVER, STANLEY HAMER, Printer; born, Johnstown, Pa., Aug. 9, 1893; son of Martin Luther Weaver and Martha Melinda Weaver.

Educated: Public schools and high school of Johnstown, Pa.

Professional: Printer.

Aeronautical Activities: School of Military Aeronautics, Ithaca, N. Y.; Scott Field, Payne Field, Park Field, Carlstrom Field.

Flying Rating: Reserve Military Aviator.

War Service: Aviation Section, Signal Corps, Jan. 1918 to April 1919.

Member: American Legion.
 Present Occupation: Printer, Pittsburgh Gazette Times.
 Address: Home, 6439 Aurelia St., Pittsburgh, Pa.

Walter R. Weaver

WEAVER, WALTER R., Major, Air Service; born, Charleston, S. C., February 23, 1885; son of Erasmus Morgan Weaver and Elizabeth (Holmes) Weaver; married, Elizabeth Ker Johnson, Sept. 30, 1911.

Educated: Prince School, Boston, Mass.; High School, Galveston, Tex.; Virginia Military Institute; U. S. Military Academy.

Professional: 2nd Lieut., Feb. 14, 1908; 1st Lieut., 1915; Capt., 1916; Major, (temp.) 1917, Aviation Section Signal Corps; Major, Air Service, 1920.

Aeronautical Activities: Wilbur Wright Field, Command of Cadets in Charge Ground Instruction; organized Mechanics School, Wilbur Wright Field; Command of and Executive Officer, Wilbur Wright Field, 1917; organized and commanded Air Service Mechanics School, St. Paul, Minn. 1918; Chief Mechanics Instruction, Office Director Air Service; Chief, Engine and Plane Maintenance, Office of Air Service, 1919-1920; Acting Chief Property Division, Office Chief Air Service, 1920.

Flying Rating: Primary Flying, March Field; Advance Flying (bombing), Kelly Field; Airplane Pilot.

Member: Army and Navy Club (Wash.); Army and Navy Club (P. I.); Sigma Alpha Epsilon.

Present Occupation: Acting Chief Property Division, Air Service.

Address: Air Service, Washington, D. C.

Clifford Lawrence Webster

WEBSTER, CLIFFORD LAWRENCE, Aviator; born, Haverhill, Mass., May 14, 1891; son of George H. Webster and Mary E. (Gardner) Webster.

Educated: Public schools and high school of Haverhill, Mass.; Dean Academy; Phillips Exeter Academy.

Professional: Upon leaving school learned to fly with the Burgess Co. and Curtiss; first flight, June 1911; qualified for A. C. A. certificate No. 69, Oct. 1911; then employed by Burgess Co. & Curtiss and in November tested their first hydro-aeroplane; did instruction, demonstration and exhibition work for this company to June 1912; returned to Burgess Co. & Curtiss in Sept. 1913; 1914-1917, experimental testing of Burgess-Dunnes; at Squantum Naval Air Station as Senior Instructor from June to Oct. 1917; transferred to Hampton Roads as Instructor, Flight Commander, and O. I. C. of assembly course mechanics school; duty with the Marines at Miami, Fla.; promoted to Lieut. (j. g.); transferred to U. S. M. C. R. on June 1918 as a 1st Lieut.; completed advanced training in gunnery, bombing and acrobatics; sent to Le Frere Field, Pay de Calais, France, July 1911 with Squadron C. Day Wing, North Bombing Group; ferried DH's from Eastleigh, England to LeFrere; returned to U. S. Dec. 1918; ordered to inactive duty, April 30, 1919; entered Air Mail Service, July 1919; flew Washington-New York, New York-Bellefont, and Bellefont-Cleveland routes; resigned after five weeks with a record of 100 per cent performance and no breakages; Aug. 1919, entered employ of America Trans-Oceanic Co. of New York; has flown 35 types, both land and water.

Flying Rating: Aero Club license No. 69, Oct. 1911; U. S. Naval Aviator, No. 112 1/2, Nov. 1917.

War Service: As above.

War Honors: Letter of commendation from Secretary of the Navy, May 10, 1918.

Member: Aero Club of America.

Present Occupation: Aviator.

Address: Curtiss Metropolitan Airplane Co., Port Washington, L. I.; home, 183 Main St., Haverhill, Mass.

Lewis S. Webster

WEBSTER, LEWIS S., 1st Lieut., Air Service; born, Lakeland, Fla., Sept. 18, 1892; son of Edgar E. Webster and Lucia M. Webster; married, Della F. Frazer, June 15, 1918.

Educated: Summerlin High School, Bartow, Fla.; three years, University of Illinois, left school to enter the war.

Professional: Two years practice in Farm Drainage and Surveying in Northern Illinois, 1913-1915.

Aeronautical Activities: Entered Ground School at University of Illinois, Nov. 10, 1917; completed course, Jan. 19, 1918; flying training at Rich Field, Jan. 23, 1918 and completed course, June 4, 1918; flying instructor's course at Brooks Field, ordered to Gall Field, Sept. 23, 1918; ordered to Langley Field, Oct. 2, 1918 and has remained there until present date; member of 88th Aero Squadron since July 1919; made trip across continent in Oct. 1919 on the Trans-Continental

Reliability and Endurance Race, finishing seventh.
Flying Rating: Reserve Military Aviator, June 6, 1918.
Member: Aero Club of America.
Present Occupation: 1st Lieut., Air Service.

Howard Franklin Wehrle

WEHRLE, HOWARD FRANKLIN, Building Constructor; born, Charleston, W. Va., Jan. 20, 1890; son of Henry Wehrle, Jr. and Alice Adams (Abbott) Wehrle; married, Anna Masten Estill, June 27, 1917.

Educated: Graded schools and Charleston High School.

Professional: Yellow Pine Lumber Co., 1907; Goshorn Hardware Co., 1910; Hagerstown Shoe Co., 1911-1912; Capitol City Supply Co., 1914-1916.

Aeronautical Activities: Entered Curtiss Aviation School, April 1916; mustered into Federal Service at Fort Monroe, July 13, 1916; assigned to duty at Mineola, N. Y., Aviation Section Signal Corps; duty at Kelly Field Nos. 1 and 2, Sept. 1917 to Oct. 1917; duty at Tullahoma Field to Sept. 1918; ordered overseas with Handed-Page Training Station No. 1; returned from England, Dec. 1918; duty at Hazelhurst Field to Feb. 1919; duty at Carlstrom Field, to May 1919; duty at St. Paul, Minn., till leaving the service; at present, Member, Aerial Service Committee, Chamber of Commerce, Kansas City.

Flying Rating: Pilot's certificate No. 658 in Federation Internationale Aeronautique; Reserve Military Aviator, March 1917.

War Service: Aviation Section Signal Corps, July 1916 to Aug. 1919.

Member: Aero Club of America; Lakewood Golf and Country Club; President, Flying Club of Kansas City; American Legion.

Present Occupation: District Manager, Kansas City Office, Kinnear Mfg. Co. of Columbus, Ohio.

Address: 503 Railway Exchange Bldg.; home, 5101 Baltimore Ave., Kansas City, Mo.

Walter I. Welden

WELDEN, WALTER I., Real Estate Dealer; born, Cosumne, Calif., Feb. 19, 1892; son of John Welden and Dora Welden.

Educated: Public schools of Picabo and Bellevue, Idaho; A.B. June 1916, William Jewell College.

Professional: High school teacher, 1916-1917; farming, June 1917 to Jan. 1918.

Aeronautical Activities: Feb. 1918, Aviation Section Signal Reserve Corps; June 1918, Ground school, School of Military Aeronautics, Berkeley, Calif.; Air Service Flying School, March Field, Oct. 1918 to May 1919.

Flying Rating: Reserve Military Aviator, May 1919.

Present Occupation: Real estate dealer.
Address: 4527 E. 4th Street, Long Beach, Calif.

George Conrad Westervelt

WESTERVELT, GEORGE CONRAD, Commander, U. S. Navy, born; Corpus Christi, Texas, Dec. 29, 1879; son of G. W. Westervelt and Ida Florence Westervelt; unmarried.

Educated: Corpus Christi Grammar and High



Howard F. Wehrle

Schools; 1901, U. S. Naval Academy; 1908, Master of Science, Massachusetts Institute of Technology.

Professional: Entered Naval Service 1897; Graduated Naval Academy 1901; Entered Construction Corps 1904; Graduated Mass. Inst. of Tech. 1908; Ships Construction and design and general Navy Yard experience until 1907; then Aeronautical duty to date.

Aeronautical Activities: Designed and built seaplane, 1914; General charge of production and inspection activities in field for Bureau Construction and Repair, Jan. 1, 1917 to Nov. 1, 1919; Considerable flying in an observation capacity or under preliminary flight instruction.

Flying Rating: None at present, Student aviator for year and a half but unable to take any consistent instruction.

War Service: General charge field inspection and production of aircraft for Bureau Construction and Repair during the war; General charge design and building of NC boats and preparation for Transatlantic Flight; member joint Army-Navy Aeronautical Commission to Europe 1917; Senior member Board of Investigation Naval Aeronautics in Europe 1918.

Books: Joint Author with Commanders Reed and Richardson of "The Triumph of the NC's"—Doubleday, Page and Company.

Member: Army and Navy Club; New York Yacht Club; Racquet Club, Philadelphia.

Present Occupation: Manager, Naval Aircraft Factory, Philadelphia, Pa.

Address: Naval Aircraft Factory; home, Racquet Club, Philadelphia, Pa.

Oscar Westover

WESTOVER, OSCAR, Major, Air Service; born, West Bay City, Mich., July 23, 1888; son of Emil Westover and Kunigunda (Gaertner) Westover; married, Adelaide Roginia Bainbridge, Dec. 31, 1907.

Educated: Kolb Grammar School; West Bay City High School; 1906, U. S. Military Academy.

Aeronautical Activities: Officer in charge, Signal Office, Port of Embarkation, Hoboken, N. J., Sept. 26, 1917 to March 18, 1918; Officer in Charge, Storage Department and Supply Depots, Signal Corps, March 18, 1918 to June 8, 1918; Officer in Charge, Storage and Traffic Department, Bureau of Aircraft Production, June 9, 1918 to Nov. 18, 1918; Assistant Executive, Bureau of Aircraft Production, Nov. 19, 1918 to Jan. 3, 1919; Assistant Executive, Office Director of Air Service, Jan. 5, 1919 to June 30, 1919; Chairman Claims Board, Air Service, Aug. 6, 1919 to Aug. 31, 1919; Executive, Air Service, July 6, 1919 to Oct. 15, 1920.

Flying Rating: Balloon Observer, March 26, 1921.

Present Occupation: Director of Aircraft Production; Chief of Balloon and Airship Division, Office, Chief of Air Service.

Address: Air Service, Washington, D. C.

Chester Eaton Wheeler

WHEELER, CHESTER EATON, Landscape Architect; born, Lowell, Mass., Aug. 23, 1891; son of Charles O. S. Wheeler and Clara Anna Eaton; married, Gladys Louisa Mellon, Nov. 3, 1915.

Educated: Public schools of Lowell, Mass.; Bachelor of Science, 1914, Massachusetts Agricultural College.

Professional: Engaged in landscape design and engineering since 1914; development of Bronx River Parkway Reservation.

Aeronautical Activities: Training at Camp Stanley, Kelly Field and Garden City, Long Island; transferred to Washington, D. C. as Supply Officer for printed matter, Jan. 1918; transferred to Souther Field as Assistant Adjutant, May 1918; Personnel Officers School, Camp Gordon; Personnel Adjutant, Souther Field to date of discharge.

War Service: Nov. 1917 to Jan. 1919.

Present Occupation: Landscape architect.

Address: Bronx Parkway Commission, Bronxville, N. Y.; home, 114 S. 3rd Ave., Mt. Vernon, N. Y.

Raymond L. Wheeler

WHEELER, RAYMOND L., Commercial Aviator; born, Edison Park, Ill., June 3, 1898; son of Walter R. Wheeler and Maude V. Wheeler.

Educated: Public schools.

Professional: May 1915 to Nov. 1917, auto race driver.

Aeronautical Activities: Dec. 1917, training at Champaign, Ill., Camp Dick, Kelly Field, Rockwell Field and Ream Field; discharged Jan. 1919; exhibition pilot, parachute jumper and plane changing aerial acrobat at present.

Flying Rating: Reserve Military Aviator; Pursuit Pilot, Oct. 1918.

War Service: Air Service, U. S. Army, Dec. 1917 to Jan. 1919.

Member: Aviation Club of Chicago; Illinois Aero Club.

Present Occupation: Commercial aviator and parachute jumper.

Address: 701 Desplaines Ave., Desplaines, Ill.



George C. Westervelt

Sylvester Lawrence Wheeler

WHEELER, SYLVESTER LAWRENCE, Patent Attorney; born, Milwaukee, Wis., July 30, 1895; son of Leverett C. Wheeler and Adele (Graves) Wheeler.

Educated: Public schools; B.A. 1917, University of Wisconsin; LL.B. 1920, University of Wisconsin Law School.

Professional: Admitted to Bar, Feb. 1921; associated with Erwin, Wheeler and Woolard, Patent Attorneys.

Aeronautical Activities: Training at Gerstner Field; Pilot Instructor in Aerial Gunnery at Carlstrom and Dorr Fields.

Flying Rating: Reserve Military Aviator.

War Service: Signal Corps, U.S.A. Aviation Section, Nov. 1917 to Dec. 1918.

Present Occupation: Patent Attorney.

Address: 204 Grand Ave., Milwaukee, Wis.; home, 59 Watson Ave., Wauwatosa, Wis.

James Frederick White

WHITE, JAMES FREDERICK, Certified Public Accountant; born, Brooklyn, N. Y., Oct. 16, 1876; son of Charles Carrol White and Charlotte (Locke) White; married, Maude Seaman, July 9, 1907.

Educated: Brooklyn public schools; 1896, New York Law School; New York University School of Accounts and Finance; New York State Certified Public Accountant No. 580, March 25, 1912.

Professional: Law until 1906; Real Estate and Law to 1908; firm member, Latimer, Rhodes & White, Accountants, 1908-1912; firm member, White & Reeve, Certified Public Accountants, 1912 to 1917; in U. S. Army, 1917 to 1919; 1920 to date, firm member, James Frederick White & Co., Certified Public Accountants.

Aeronautical Activities: Plattsburg Training Camp, 1917; 1st Lieut., 49th Inf., 1917; Dec. 1917 to Aug. 1918, Personnel Officer, Aviation Section Signal Corps; Captain and Commanding Officer, 6th Detachment A.S.A.P.; Sept. 1918 to July 1919, District Manager of Production, Detroit, Mich.; promoted to Major, Air Service and discharged July 1919.

War Service: As above.

Member: Garden City Country Club; Army Athletic Association; American Legion, Accountants Post No. 816 and Rockville Centre Post No. 303.

Present Occupation: Certified Public Accountant.

Address: 33 West 42nd Street, New York City; home, 129 Wellington Road, Garden City, Long Island, N. Y.

Ennis Clement Whitehead

WHITEHEAD, ENNIS CLEMENT, 1st Lieut., Air Service; born, Westphalia, Kans., Sept. 3, 1895; son of J. E. Whitehead and Celia Whitehead; married, Mary Morse Nicholson, Sept. 25, 1920.

Educated: Public and high schools; A.B. 1920, University of Kansas.

Aeronautical Activities: Training at various camps in U. S. and France; Test Pilot, 3rd A.I.C., May 1918 to Nov. 1918.

Flying Rating: Reserve Military Aviator, Oct. 1917; Airplane Pilot, Jan. 1921.

War Service: Air Service, May 1917 to Jan. 1919.

Present Occupation: 1st Lieut., Air Service.

Address: 1st Group (Pursuit), Ellington Field, Houston, Tex.

William Edwin Whitehouse

WHITEHOUSE, WILLIAM EDWIN, Nursery Business; born, Somerville, Mass., Aug. 29, 1892; son of Edward Ezra Whitehouse and Lillian Pearl Whitehouse.

Educated: Grimes Grammar School, Somerville English High School; B.S. 1915, Oregon Agricultural College; M.S. 1920, Iowa State College.

Professional: Research Assistant, Iowa Agricultural Experiment Station, 1916-1917; army, 1917-1919; Iowa Agricultural Experiment Station, 1919-1920; Capital City Nurseries, Des Moines, Iowa, 1920-1921; Instructor, Maryland University, College Park, Md.

Aeronautical Activities: S.M.A., Austin, Tex., Dec. 1917 to Feb. 1918; Camp Dick, Love Field, Feb. 1918 to July 1918; commissioned 2nd Lieut. A.S.A., July 1918; assigned to active duty at Love Field, Brooks Field; course in flying instruction and acted as flying instructor at Mather Field, Calif.

Flying Rating: Reserve Military Aviator, July 1918.

Present Occupation: Instructor, Maryland University, College Park, Md.

Address: Univ. of Md., College Park, Md.; home, Amherst, N. H.

Frank Pearce Whitehurst

WHITEHURST, FRANK PEARCE, Farmer; born, Princess Anne Co., Va., April 22, 1890; son of W. L. Whitehurst and Henrietta (Woodhouse) Whitehurst; married, Frances G. Cherry, May 9, 1921.

Educated: Public and high schools; Eastman College.

Professional: Farmer, 10 years; bank clerk, 2 years.

Aeronautical Activities: Princeton S.M.A., Dec. 15 to Feb. 23, 1918; training at Dallas, Tex., San Antonio, Tex., and Garden City, 1918.

Flying Rating: Reserve Military Aviator.

War Service: U. S. Army, 2nd Lieut., Oct. 1917 to Dec. 1918.

Member: Aero Club of America.

Present Occupation: Farmer.

Address: R. F. D. No. 5, Box 117, Princess Anne Co., Va.

Frank Simpson Whiting

WHITING, FRANK SIMPSON, Bond Business; born, Somerset, Ky., Dec. 4, 1893; son of Harley E. Whiting and Ada A. (Simpson) Whiting; married, Dorothy Cooper, May 27, 1919.

Educated: Public schools of Chicago; S.B. 1916, University of Chicago.

Professional: Automobile Blue Book Publishing Co., 1915-1916; E. H. Rollins & Sons, 1917-1920; A.B. Leach & Co., 1920-1921.

Aeronautical Activities: Ground School, Champaign, Ill., June, 1917; England, Aug. 1917 to May 1918; at front with 98th Squadron, Royal Flying Corps, May 1918 to Sept. 1918; Executive Officer, Ellington Field, Nov. 1918 to Jan. 1919.

Flying Rating: Reserve Military Aviator, March 23, 1918.

War Service: Army, May 1917 to Jan. 1919.

Member: Chicago Athletic Association, Chicago, Ill.

Present Occupation: Whiting & Co. Investment Securities.

Address: 105 S. LaSalle St.; home, 2219 E. 70th St., Chicago, Ill.

Joseph Lafeton Whitney

WHITNEY, JOSEPH LAFETON, Commercial Aviation; born, Hubbard, Iowa, Sept. 7, 1894; son of A. F. Whitney and Grace E. (Marshman) Whitney.

Educated: Austin High School, Chicago, Ill.; A.B. 1917, University of Illinois.

Professional: Curtiss Aeroplane & Motor Corp., 1920.

Aeronautical Activities: Ground School, University of Illinois, Oct. 1917; flying cadet, Kelly Field, Dec. 1917; flying instructor, Kelly Field, officer in charge of acrobatic flight; victory loan flying circus; with Curtiss Aeroplane & Motor Corp., June 1919 to date.

Flying Rating: Aero Club of America F.A.I. pilot certificate No. 1338, March 1918; Reserve Military Aviator.

War Service: U. S. Air Service.

Member: Aviation Club of Chicago.

Present Occupation: District Manager, Curtiss Aeroplane & Motor Corp.

Address: 30 North Michigan Ave., Chicago, Ill.; home, 834 Fair Oaks Ave., Oak Park, Ill.

John Henry Wiggins

WIGGINS, JOHN HENRY, Petroleum Engineer; born, March 13, 1889; son of John Wiggins and Margaret (Waters) Wiggins.

Educated: Grammar School and Central High School, Washington, D. C.; A.B. 1911, Stanford University; Engineer Stanford, 1915.

Professional: 1911-1913, Engineering-evaluation, reconnaissance surveying, latitudes, longitudes; irrigation operation, 1913-1914; 1916 to date, petroleum engineering.

Aeronautical Activities: Flying training at Princeton Ground School, Carlstrom, Dorr and Barron Fields.

Flying Rating: Reserve Military Aviator.

War Service: As above.

Present Occupation: Petroleum Engineer.

Address: U. S. B. M.; home, 1323 Dewey Ave., Bartlesville, Okla.



George M. Williams

Charles Michael Wightman

WIGHTMAN, CHARLES MICHAEL, Banking Business; born, St. Louis, Mo., Dec. 10, 1891; son of William Edward Wightman and Adela Augustine Wightman.

Educated: Baden School, Clay School, Yeatman School, all of St. Louis.

Professional: Five years with the Shapleigh Hardware Co. of St. Louis; three years with the Gila Valley Trust Co., Miami, Ariz.; two years with The Valley Bank, Phoenix, Ariz.

Aeronautical Activities: Training at Post Field, Camp Dick and Barron Field.

Flying Rating: Airplane Observer, Dec. 1918.

War Service: Army, Dec. 1917 to Feb. 1919.

Present Occupation: Banking.

Address: Phoenix, Ariz.; home, 8559 Mora Lane, St. Louis, Mo.

Wadsworth Wilbar

WILBAR, WADSWORTH, Advertising; born, Taunton, Mass., Feb. 18, 1894; son of Albert Edwards Wilbar and Hattie (Moore) Wilbar; married, Rachel Forbes, April 20, 1918.

Educated: Public schools of Taunton, Mass.; Allen School, West Newton, Mass.; Amherst College, 1917.

Professional: Manufacturing business; advertising.

Aeronautical Activities: Ground School, M. I. T.; flying training at Naval Air Station, Pensacola, Fla.; flying duty at Montauk, L. I.

Flying Rating: Ensign.

War Service: 1917-1918.

Member: Massachusetts Aero Club.

Present Occupation: Advertising business.

Address: 44 Bromfield St., Boston; home, 142 Middlesex Road, Chestnut Hill, Mass.

Robert Nicholas Wilford

WILFORD, ROBERT NICHOLAS, Copper Business; born, De Soto, Wis., Sept. 20, 1892; son of James Wilford and Ellen Wilford; married, Marianne E. Earhart, Sept. 14, 1918.

Educated: Public school of De Soto, Wis.; high school at Aurora, Ill.; B.S. 1917, University of Illinois.

Professional: Agriculture to fall of 1917; Texas Oil Co. Refinery at Port Arthur, Tex., from Feb. 1919 to March 1920; flying in Butte, Mont., from April to June 1920; Anaconda Copper Mining Co., June 1920 to date.

Aeronautical Activities: Ground School, University of Illinois, Nov. 1917 to Jan. 1918; training at Rich Field, Brooks Field and Taylor Field; since discharge has been flying various types of planes in Butte, Mont.

Flying Rating: Reserve Military Aviator, May 1918.

War Service: Infantry, Sept. 1917 to Nov. 1917; Army Aviation, Nov. 1917 to Dec. 1918.

Present Occupation: Anaconda Copper Co.

Member: Aero Club of America; American Legion.

Address: P. O. Box 175, Wyoming, Ill.

Andrew Van Dean Willgoos

WILLGOOS, ANDREW VAN DEAN, Automotive Engineer; born, New Brunswick, N. J., Oct. 31, 1888; son of Joseph Willgoose and Elizabeth J. (Rendle) Willgoose; married, Grace B. Serviss, April 29, 1914.

Educated: Public schools of Livingston Park and New Brunswick.

Professional: Western Electric Co. 1905-1907; Veile, Blackwell & Buck, 1907-1909; Standard Plunger Elevator Co., 1909-1911; designer and draftsman, Simplex Automobile Co., 1911-1915; Chief Draftsman, Simplex Automobile Co., 1915-1916.

Aeronautical Activities: Chief Draftsman, Wright-Martin Aircraft Corp., 1916-1919; Chief Draftsman, Wright Aeronautical Corp., 1919-1920; Asst. Engineer, Wright Aeronautical Corp., 1920 to date.

Member: Society of Automotive Engineers.

Present Occupation: Asst. Engineer, Wright Aeronautical Corp.

Address: 238 Lewis St., Paterson, N. J.; home, 373 18th Ave., Paterson, N. J.

Charles Goodwin Williams

WILLIAMS, CHARLES GOODWIN, Aeronautical Engineer, born, Chicopee, Mass., Sept. 10, 1875; son of Charles J. Williams and Sarah Ann (Goodwin) Williams; married, Mary Van Hyning, 1915.

Educated: Public schools and business college of Springfield, Mass.; International Correspondence Schools; 1900, Mass. Inst. of Tech.

Professional: Ordnance Engineer, U. S. Army, Springfield, Mass., Rock Island, Arsenal, Ill.; U. S. Ordnance Engineer in China during Boxer Rebellion; Experimental Engineer, International Harvester Co.; Aviation Superintendent, Indian Motorcycle Co., Springfield, Mass.

Aeronautical Activities: Designer of Air Cooled Rotary Aviation Engines for Indian Motorcycle Co., 1911; Chief Inspector, airplanes and airplane motors; U. S. Signal Corps, 1916, stationed at Hammondsport, N. Y., Buffalo, N. Y., Ithaca, N. Y., West Berkeley, Calif.; 1917, engineering production of Liberty Engines, Detroit, Mich.; 1918, 1919 to date, A. E. A. S. L., Engineering Division, McCook Field.

Present Occupation: Air Service Representative Ordnance Engineering Corp., Baldwin, L. I. *Address:* Engineering Division, McCook Field, Dayton, Ohio.

George Montague Williams

WILLIAMS, GEORGE MONTAGUE, Airplane Manufacturer; born, Nanaimo, B. C. Canada, April 6, 1890; son of George Williams and Elizabeth H. (Stannard) Williams; married, Gwendoline Ware, Jan. 26, 1914.

Educated: Trinity College School, Port Hope; Soo Technical Institute.

Professional: 1909-1911, Asst. Engineer, Lake Superior Power Co.; 1911-1914, Asst. Chief Engineer, The H. E. Talbot Co.; 1914-1916,

Ass't. Vice-President, The Dayton Metal Products Co.; 1916-1919, Ass't. to President, The Dayton Wright Airplane Co.; 1919 General Manager, Dayton Wright Co., Dayton, Ohio.
Aeronautical Activities: Continuous airplane construction since 1916.

Member: Society Automotive Engineers (Dayton Section); Engineers Club of Dayton; Aero Club of America; Amer. Soc. Mech. Eng.
Present Occupation: General Manager, The Dayton Wright Co.
Address: Dayton Wright Co., Dayton, O.; home, Oakwood, Dayton, O.

John M. Williams, Jr.

WILLIAMS, JOHN M. JR., Aeronautical Design; born, Greenwich, Conn., Nov. 13, 1892; son of John M. Williams and Hannah G. Williams.

Educated: Private schools, Greenwich Academy and Brunswick School; St. Pauls College, Garden City, L. I., N. Y., 1919.

Professional: Automotive Machine Co., 1914-1916; Experimental Engineer, Locomobile Co., 1917; designer, Wright Aeronautical Corp., 1920.

Aeronautical Activities: 1910, built monoplane training at Love Field; engine designer 1920, Wright Aeronautical Corp.

Flying Rating: Reserve Military Aviator, Aug. 9, 1918.

War Service: Sept. 1917 to Oct. 1919.

Member: Society of Automotive Engineers.

Present Occupation: Design Section, McCook Field; Government Experimental Work.

Address: McCook Field; home, 210 W. 2nd Street, Dayton, Ohio.

Marvin Carrol Williams

WILLIAMS, MARVIN CARROLL, M.S., Air Service; born, Farmington, Mo., Jan. 31, 1887; son of Joseph Carroll Williams and Jennie (Price) Williams; married, Grace Frances Staley, May 4, 1918.

Educated: Private Schools; Farmington Baptist College; Carleton College.

Professional: Enlisted in Signal Corps, June 1906; duty in Philippine Islands, 1907-1908, Post Telegraph Operator, Rizal, P. I.; 1909, on mine planter as radio operator, San Francisco Bay; 1910, 1911, radio operator on U. S. Transport, Logan; 1911, 1912, Post Telegraph Operator, Presidio of San Francisco, Calif.; 1913, 1914, on duty at Fort Omaha, Nebr., Texas City, Tex., San Diego, Calif.; 1915, with Pershing Expedition; 1917, on duty at Kelly Field, Fort Sam Houston, and Chanute Field.

Aeronautical Activities: 1918, Chief Clerk in Aviation General Supply Depot, Chicago, Ill.; 1919, in charge of Engineer Office, Scott Field; 1920, Chief Mechanic, 95th Pursuit Squadron Headquarters, Kelly Field, No. 2; 1920 to date, Chief Clerk, Middletown Air Intermediate Depot, Middletown, Pa.; in charge of maintenance engineering and sales office, Air Park activities Mitchell Field.

War Service: Continuous service, U. S. Signal Corps and Air Service, since June 1906.

Present Occupation: Air Park activities, Mitchell Field.

Address: Mitchell Field, L. I., N. Y.

Rodney D. Williams

WILLIAMS, RODNEY D., Stock Raiser; born, Delafield, Wis., Jan. 29, 1896; son of Owen R. Williams and Mamie Robertson Williams.

Educated: Waukesha High School; Carrol College (ex '17).

Professional: Scientific farming, 1914-Aug. 1, 1917, 1919-1922.

Aeronautical Activities: Flying Cadet, Toronto, Aug. 1 to Oct. 31, 1917; 17 Squadron, Nov. 5, 1917 to Jan. 30, 1918; 3 Squadron, R.A.F., Feb. 1, 1918 to June 30, 1918; 17 Squadron, June 30 to Aug. 23, 1918.

Flying Rating: R. M. A.

Honors: Cited British and American dispatches and by General Pershing.

Present Occupation: Stock Raiser.

Address: Route 1, Templeton, Wis.

Seldon Thornton Williams

WILLIAMS, SELDON THORNTON, Aeronautical Engineer; born, Canton, N. Y., Feb. 7, 1892; son of Frank F. Williams, M.D. and Lillabel A. (Thornton) Williams; married, Ella E. Vagler, Oct. 12, 1918.

Professional: Canton public schools; B.S. 1913, St. Lawrence University; B.S. in Mechanical Engineering, 1916, Worcester Polytechnic Institute.

Professional: Technical Editor, Motor World Magazine, 1916-1917; Aeronautical Engineer, Naval Aircraft Factory, 1918 to date.

Aeronautical Activities: Experimental Engineer, Naval Aircraft Factory; observer on trial flights, 1918-1919; Project Engineer, 1919 to date.

War Service: Civilian Aeronautical Engineer, Naval Aircraft Factory.

Books: "Automobile Repairman's Helper."

Member: Society of Automotive Engineers.

Present Occupation: Aeronautical Engineer.

Address: Navy Yard, Philadelphia, Pa.; home, 2997 Merrimac Road, Fairview, N. J.

Wheeler Williams

WILLIAMS, WHEELER, Student; born, Chicago, Ill., Nov. 3, 1897; son of Lawrence Williams and Adele Holbrook (Wheeler) Williams.

Educated: Chicago Latin School; Phillips Exeter Academy; Ph.B. 1918, Yale Sheffield Scientific School; Harvard Graduate School of Architecture.

Aeronautical Activities: Cadet courses and duty as flight instructor in balloons.

Flying Rating: Aerial Observer, Oct. 1918.

War Service: March 1918 to Jan. 1919.

Present Occupation: Student of Architecture.

Address: Robinson Hall, Cambridge, Mass.; home, 56 Bellevue Place, Chicago, Ill.

William Carlton Williams, Jr.

WILLIAMS, WILLIAM CARLTON, JR., Automobile Business; born, Atlantic, Iowa, June 27, 1891; son of William Carlton Williams, Sr. and Hannah Milward (Turner) Williams; married, Mildred Louise Appleman, Nov. 15, 1918.

Educated: Atlantic grade and high schools; Iowa State College.

Professional: Manager, Flying for Herring Motor Co.; automobile business.

Aeronautical Activities: Ground school, University of Illinois; Camp Dick; Kelly Field; Call Field; Post Field.

Flying Rating: Reserve Military Aviator.

War Service: Aug. 1917 to March 1920.

Member: Aero Club of Iowa; Aero Club of America.

Present Occupation: Garage owner.

Address: Coon Rapids; home, Menlo, Iowa.

Warren Dempsey Williams

WILLIAMS, WARREN DEMPSEY, Pilot, U. S. Air Mail Service; born, Richland, Ga., Oct. 3, 1894; son of James T. Williams and Fannie (Snellings) Williams.

Educated: High School, Savannah, Ga.

Aeronautical Activities: Photographic detachment, 1st Aero Squadron, Jan. 1917 to Jan. 1918; in charge photo section No. 1, 1st Observation Group, Advance Zone, A. E. F., Feb. 1918 to Sept. 1918; Pilot, A. E. F., Nov. 1918 to April 1919; instruction, Mitchell Field, May and Sept. 1919; U. S. Air Mail, Aug. 1920.

Flying Rating: Brevet D'Aviateur Militaire, No. 17703, Nov. 1918; Reserve Military Aviator.

War Service: U. S. Army, Dec. 1916 to May 1920.

Present Occupation: Pilot, U. S. Air Mail Service.

Address: Air Mail Field, Cleveland, Ohio; home, 509 West 35th St., Savannah, Ga.

Will Dorrah Williams

WILLIAMS, WILL DORRAH, Automobile Business; born, Pana, Ill., May 12, 1893; son of Tice W. Williams and Sarah (Dorrah) Williams.

Educated: Public and high schools of Pana, Ill.; School of Military Aeronautics, Cornell University.

Professional: Photography; automobile business since 1914.

Aeronautical Activities: Flying training at Carruthers Field.

Flying Rating: Reserve Military Aviator.

War Service: Air Service, Dec. 1917 to Dec. 1918.

Present Occupation: Garage Manager.

Address: 222 W. Main St., Taylorville, Ill.; home, 307 E. 6th St., Pana, Ill.

William George Williams

WILLIAMS, WILLIAM GEORGE, Executive; born, Holt, Mo., Aug. 10, 1895; son of Charles C. Williams and Elizabeth Williams; married, Dorothy H. Wilder, Dec. 14, 1917.

Educated: Scarritt Ward School and Northeast High School, Kansas City, Mo.; Kansas City School of Law.

Professional: Admitted to the Bar in Missouri, 1917.

Aeronautical Activities: School Military Aeronautics, University of California; Flying School, March Field; School of Fire, Ft. Sill, Okla.; Observer's School, Post Field.

Flying Rating: Pilot and Observer, A.S.R.C.

War Service: U. S. Army, Dec. 1917-Dec. 1918.

Present Occupation: Manager, Enid Board of Trade.

Address: 603-5 Enid Bank Bldg.; home, 1210

Elbert Ezra Wilson

WILSON, ELBERT EZRA, Attorney at Law; born, Winstonsalem, N. C., Jan. 18, 1895; son of Samuel Branson Wilson and Frances (Bailey) Wilson.

Educated: Dell High School, N. C.; Ecole Militaire, St. Maixent, France; Académie Marylan Academy of Science, 1911, LL.B., Wake Forest College, 1920.

Aeronautical Activities: School for Aerial Observers, Ft. Sill, Okla., 1917; Mitchell Field, L. I., 1918; Camp Woodley, England, 1918; First Corps School, Gondrecourt, France, Feb. and March 1918; Commanding Officer of 4th Art. Aero Observers School, Meucou, France, May 10 to June 29, 1918.

Flying Rating: Observer.

War Service: World War, May 1917 to July 1919.

Member: American Legion; Veterans of Foreign Wars.

Present Occupation: Attorney at Law.

Address: 505 Wachovia Bldg.; home, 110 Dalton St., High Point, N. C.

Hubert LaDoyt Wilson

WILSON, HUBERT LADOYT, Aeronautical Engineer; born, Portland, Ind., May 19, 1895; son of George A. Wilson and Luella K. Wilson.

Educated: Public schools of Portland, Ind.; 1915-1916, Oberlin College.

Professional: Highway Transport Lines, Detroit, Mich., 1920; Sheridan Motor Car Co., 1921.

Aeronautical Activities: S.M.A., Toronto University, 1917; School of Aerial Gunnery, Ft. Worth, Tex.; flying training at Thetford and Duxford, England, 1918; commercial aviation with Triangle Aircraft Association, Cincinnati, Ohio, 1919.

Flying Rating: Aero Club License No. 1307; Reserve Military Aviator, Feb. 1918; British Service Pilot, Nov. 1918.

War Service: May 1917 to Jan. 1919.

Member: American Legion; Aero Club of America.

Present Occupation: Planning Engineer, McCook Field.

Address: 1329 Riverside Drive, Dayton, Ohio.

Burr Horton Winslow

WINSLOW, BURR HORTON, Air Mail Pilot; born, Horton City, Pa., June 15, 1892; son of Orin S. Winslow and Minnie (Horton) Winslow.

Educated: Public schools.

Professional: Lumber business from 1910 to 1915; insurance and mining, 1915-1917; oil business, 1920.

Aeronautical Activities: Enlisted U. S. Air Service, May 1917; cadet training at S. M. A. Cornell University; flying training at Call Field; instructor at Post Field eight months; discharged at San Francisco Presidio, Sept. 1919; Air Mail Pilot since Oct. 1920.

Flying Rating: Reserve Military Aviator, Sept. 1918.

War Service: As above.

Member: Aero Club of America; Air Mail Pilots Association.

Present Occupation: Air Mail Pilot.

Address: c/o Air Mail Service, Reno, Nev.; home, Brockport, Pa.

Charles C. Witmer

WITMER, CHARLES C., Commercial Aviator; born, Sandusky, Ohio, June 8, 1882; son of Winfield Scott Witmer and Elnora (Ireland) Witmer; married, Lydia Peltz, July 1915.

Professional: Railway construction, 1898-1903; prospecting and mining, 1903-1910.

Aeronautical Activities: Experimental work with Glenn H. Curtiss at Hammondsport and San Diego, Calif., 1910; learned to fly 1911; exhibition flying in twenty states, 1911 and 1912; demonstrated and delivered Curtiss products in Russia, Germany, France and Austria, 1912-1913; flying for Harold F. McCormick, 1913; Russia, 1914-1916; U. S. Navy R.F. March 1917 as Lieutenant; promoted to Lt. Comdr. 1918; Superintendent, Construction of Aircraft, 1st Naval District, later Superintendent, Construction of Aircraft and Inspection, Akron, Ohio, 1920.

Airship Manufacturing Co. of America, to date.

Flying Rating: Aero Club of California License No. 4; Aero Club of America License No. 52.

War Service: 1917, Lieutenant, U.S.N.R.F.; 1918, Lt. Comdr., U.S.N.R.F.; Superintendent Constructor of Aircraft.

Member: Aero Club of America.

Present Occupation: Airship Manufacturing Co. of America.

Address: Hammondsport, N. Y.

Carl K. Wollam

WOLLAM, CARL K., Pilot; born, St. Clair, Ohio, Feb. 10, 1893; son of S. S. Wollam and Etta Wollam; married, Corream McShane, June 18, 1913.

Educated: Public schools of East Liverpool, Ohio.

Professional: Aeronautics, 1911 to 1912; 1912 to 1913, automobile and electric business; 1913 to date, aeronautics.

Aeronautical Activities: Experimental airplanes, 1911 to 1912, Curtiss Aeroplane Co. 1915; in charge of assembly airships at various naval air stations and flying instructor in balloons, Wing-foot Lake Naval Air Station, 1917 to 1920; Chief Pilot, Goodyear Tire & Rubber Co. of California and Marshal Neilan Prod. from 1920 to 1921.

Flying Rating: Dirigible Pilot No. 36; Free Balloon Pilot; Kite Balloon and Aeroplane Pilot.

War Service: Industrial Aircraft Service during the war.

Present Occupation: Sales.
Address: Goodyear Tire & Rubber Co.; home, 322 W. Market St., Akron, Ohio.

Henry A. Wise Wood

WOOD, HENRY A. WISE, Inventor and writer; born, New York City, March 1, 1866; son of Fernando Wood and Alice F. (Mills) Wood; married, Elizabeth O. Brown, 1891.

Educated: Private schools.

Professional: Inventor of Autoplate and many other improvements in newspaper printing machinery.

Aeronautical Activities: Editor "Flying" from its founding till 1918; Governor, Aero Club of America, 1911 to 1921; Founder and Pres., Amer. Soc. of Aeronautic Engineers, merged with S.A.E.

War Service: Member, U. S. Naval Consulting Board (resigned).

Books: "Fancies" (poems), "The Book of Symbols," "Money Hunger."

Member: New York Yacht Club; Aero Club of America; Society Naval Architects and Marine Engineers; American Association for the advancement of Sciences; S.A.E.

Present Occupation: Engineer.
Address: 25 Madison Ave.; home, 194 Riverside Drive, New York.

James A. Woodruff

WOODRUFF, JAMES A., 1st Lieut., U. S. Air Service; born, Riverside, Ill., March 8, 1895; son of Charles A. Woodruff and Louise (Blayney) Woodruff.

Educated: West Division Height School, Milwaukee, Wis.

Aeronautical Activities: Air Service, Jan. 1918 to date.

Flying Rating: Reserve Military Aviator, May 25, 1918; Airplane Pilot.

War Service: Army, May 28, 1917 to date.

Present Occupation: 1st Lieut., Air Service.
Address: Langley Field, Va.

Arthur Woods

WOODS, ARTHUR, Publicist, born, Boston, Mass., Jan. 29, 1870; son of Joseph W. Woods and Caroline Frances (Feliz) Woods; married, Helen Morgan Hamilton, June 10, 1916.

Educated: Boston Latin School; A. B., 1892, A. M. (Hon.) 1916, LL.D. 1920, Harvard.

Professional: Schoolmaster; Merchant; Newspaper Reporter; Lumberman; Police Commissioner, New York City.

Aeronautical Activities: Chief of Personnel; Asst. Director of Military Aeronautics; Air Service.

War Service: Commissioned Lt. Col. Mar. 2,

1918; Colonel, Aug. 20, 1918; Overseas, Sept., Nov.; Discharged Jan. 31, 1919.

War Honors: Cross of St. Michael and St. George; Chevalier of the Legion of Honor.

Books: "Crime Prevention," "Policeman and Public."

Flying Rating: Reserve Military Aviator.
War Service: June 1917 to Aug. 1919.

Present Occupation: Newspaper publisher and writer.

Address: 139 North Fourth St.; home 323 North Sixth St., Hebron, Nebr.



Orville Wright

Member: Harvard (N. Y.) and (Boston); Racquet and Tennis, N. Y.; Chevy Chase (Wash.); National Press (Wash.); Coffee House, N. Y.

Address: Woolworth Bldg.; home, 165 E. 74th Street, New York City.

Kenyon Woody

WOODY, KENYON, Commercial Aviation; born, Wilmington, N. C., Aug. 31, 1898; son of Edward G. Woody and Elsie (Calder) Woody.

Educated: No. 152 and Manual Training High School, Brooklyn, N. Y.

Aeronautical Activities: Entered Air Service on finishing High School; 1st Aero Co., N. Y. N. G., 1916; later in Aero Co. B., A.S.S.C. to beginning of World War; flying cadet, 1917, training at Kelly Field; Wilbur Wright Field, 1918, Payne Field to Jan. 1919, Carlstrom Field to March 1919.

Flying Rating: Reserve Military Aviator, Aug. 1918; Aero Club of America's Aviators Certificate, Nov. 1918; Expert's Certificate, April 1919.

War Service: As above.
Present Occupation: Commercial flying in the South Atlantic States.

Address: Calder and Woody, R. F. D. No. 2, Wilmington, N. C.

Arthur Vance Wortman

WORTMAN, ARTHUR VANCE, Newspaper Publisher and Writer; born, Cass County, Nebr.; son of Otha J. Wortman and Ada Carrol (White) Wortman; married, Josephine McKeown, April 12, 1920.

Educated: Public schools of Ashland, Nebr.; high school; Nebraska University.

Professional: Publishing and editorial work, 1912 to date.

Aeronautical Activities: Air pilot, July 1918 to Aug. 1919; Instructor K. F. T., 1919; Assistant Engineer Officer.

Bailey Ayers Wright

WRIGHT, BAILEY AYERS, Paper Business; born, Urbana, Ohio, Nov. 30, 1892; son of Charles H. Wright and Julia Ayers Wright; married, Ethel B. VandeGiessen, June 7, 1920.

Educated: Public schools of Kalamazoo, Mich.; Western State Normal High School.

Professional: Paper and motor truck business from 1913 to date.

Aeronautical Activities: Army Air Service, Jan. 1918 to Jan. 1919.

Flying Rating: Reserve Military Aviator, Sept. 1919.

Present Occupation: General Manager, Paramount Paper Co.

Address: 606 Kalamazoo National Bank Bldg.; home, 133 W. Cedar St., Kalamazoo, Mich.

Elijah Floyd Wright, Jr.

WRIGHT, ELIJAH FLOYD, JR., Coal Mining; born, Woodlake, Ky., May 16, 1898; son of Elijah Floyd Wright, Sr. and Mary Nellie (Duggan) Wright.

Educated: Preparatory school; Cumberland College; A. B. 1921, Princeton.

Professional: Court stenographer.

Aeronautical Activities: Training at Hazelhurst Field, Gerstner Field, and Carlstrom Field; Flying Instructor, Dorr Field; Flying Instructor Gerstner Field.

Flying Rating: Reserve Military Aviator.

War Service: Sept. 1917 to Jan. 1919.

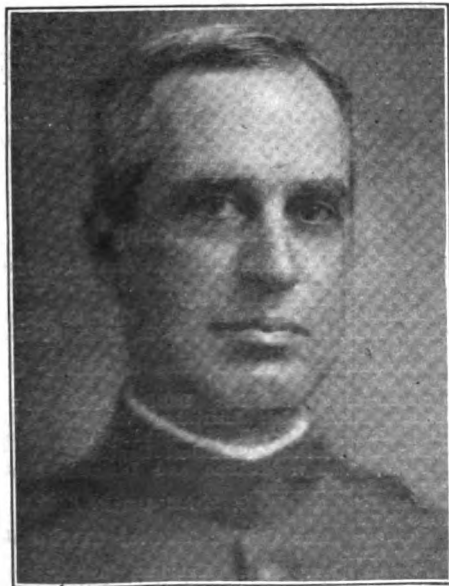
Member: Princeton Aero Club.

Present Occupation: Coal Mining.

Address: Williamsburg, Ky.

Nicholas Carter Wright

WRIGHT, NICHOLAS CARTER, Automobile Business; born, Surry Court House, Va., Aug. 4, 1894; son of Nicholas C. Wright and Mary (Land) Wright.



Arthur Woods

Educated: Public schools; Virginia Polytechnic Institute, 1913-1915, Electric Engineering.

Professional: Automobile salesman from 1915 to 1916; General Manager of Oldsmobile Co. of Norfolk, Va., 1917 and 1918; Army Air Service, 1918 to 1919; Pilot for Danville Aircraft Corp., Aug. 1919 to March 1920; Sales Manager for H. H. Johnson at present time.

Aeronautical Activities: Ground School, March 1918; Barron Field, Tex., Aug. 1919 to March 1920; exhibition work and passenger flying in the south; operating flying boat in and around Norfolk, Va.

Flying Rating: Reserve Military Aviator.

War Service: Army, A.S.S.R.C., Dec. 1917 to Jan. 1919.

Member: Aero Club of America.

Present Occupation: Sales Manager, H. H. Johnson, Distributor Chandler Cars for State of Virginia, also operating flying boat.

Address: 1414 Granby St., Norfolk, Va.; home, 8th St., Willoughby Beach, Va.

Orville Wright

WRIGHT, ORVILLE, Aeronautical Engineer; born, Dayton, Ohio, Aug. 19, 1871; son of Rev. Milton Wright and Susan Catherine (Koerner) Wright; unmarried.

Educated: Public schools, Dayton, Ohio, Cedar Rapids, Ia., and Richmond, Ind.; Honorary degrees: Doctor of Technical Science, 1909; Royal Technical College, Munich; Master of Science, 1909, Earlham College; LL.D. 1910, Oberlin College; D. Sc. 1915, Trinity College; D. Sc. 1917, University of Cincinnati; M.A. 1919, Yale University; Medals: Gold Medal of the Aero Club of France, 1908; Gold Medal of the Aero Club of the United Kingdom (Great Britain), 1908; Gold Medal of the Academy of Sports of France, 1908; Gold Medal, presented by the Aeronautical Society of Great Britain, 1908, Gold Medals from the State of Ohio, 1909, from Congress of the United States, 1909, from the City of Dayton, 1909, from Aero Club of America, 1909; Langley Medal awarded by the Smithsonian Institution, 1910; Cross of "Chevalier of the Legion of Honor" awarded by the French Republic, 1909; Gold Medal awarded by the Institute of France, Academic of Sciences, 1909; Bronze Medal of the International Peace Society; Collier Trophy awarded by the Aero Club of America for the year 1913 in recognition of the development and demonstration of the automatic stabilizer; Elliott Cresson Medal awarded by the Franklin Institute of Philadelphia, 1914; Albert Medal awarded by The Royal Society of Arts, 1917; John Fritz Medal, awarded by a Board appointed by the governing bodies of the four national societies—American Society of Civil Engineers, American Institute of Mining Engineers, American Society of Mechanical Engineers and American Institute of Electrical Engineers, 1920.

Professional: 1889-1896, printing and publishing; 1892-1903, bicycle manufacturing and repairing; 1905-1907, negotiations for the sale of airplane, five months spent in Europe in 1907; 1908, sold French patents to Compagnie Generale de Navigation Aeriennne; 1909, formation of Flugmaschine Wright Gesellschaft in Germany and The Wright Company in America; 1909-1912, vice-president, The Wright Company; 1912-1915, President, The Wright Company, Chairman of the Board of Directors of The British Wright Company, organized in 1913; 1915-1920, consulting engineer.

Aeronautical Activities: First man to fly in power driven heavier-than-air machine; 1899, with his brother Wilbur experimented with model airplanes using wing warping for the first time for lateral balance; 1900, experimented with man-carrying glider at Kitty Hawk, N. C.; 1901-1902, designed wind tunnel and balances and made measurements of the lift and drift at angles from zero to 45 deg. of several hundred aerofoils; the center of pressure also measured on several of these; the system of control given in the original Wright patent was completed at this time; 1903, built motor-driven airplane with which on Dec. 17, 1903, at Kitty Hawk, N. C., the first flight in history was made; 1904-1905, continued experiments with motor-driven planes near Dayton, Ohio; 1905-1907, developed the four cylinder vertical engine, later used on the Wright Model "B"; 1908, tested machine on contract with the United States Government at Fort Meyer, Va., during which tests the first flight of one hour's duration was made; these flights were terminated by an accident in which Lieutenant Selfridge was killed and Mr. Wright seriously injured; 1909, joined his brother Wilbur in France and Italy; completed the tests for the American Government in July; then returned to Europe, flying during several months in Germany; 1910-1915, designing and testing airplanes, automatic stabilizer, etc.; 1915, aeronautic research in wind tunnel at laboratory at Dayton, Ohio; appointed member of the National Advisory Committee for Aeronautics by President Wilson.

Flying Rating: Aero Club of France License No. 14; aviation certificate No. 4 of the Aero Club of America issued under F.I.A. Rules.

Member: Engineer's Club (Dayton), The Franklin Institute, Society of Automotive Engineers, Academy of Political and Social Science;

Honorary Memberships: Aero Club of Sarthe, France; Aero Club of America; Aeronautical Society of America; Aero Club of the United Kingdom (Great Britain); Royal Aeronautical Society (Great Britain); Österreichischer Flugsportverein, Vienna, Der Verein Deutscher Flugtechniker, Berlin; Columbia University Aero Club; Harvard Aeronautical Society; American Society of Mechanical Engineers; Cleveland Aviation Club; Aero Club of Texas; Aero Club of Dayton; Ohio Society of New York; Royal Aeronautical Society (Great Britain).

Present Occupation: Aeronautical research.
Address: 15 North Broadway; home, Harmon and Park Aves., Dayton, Ohio.



William C. Young

Charles Bierer Wrightsman

WRIGHTSMAN, CHARLES BIERER, Oil Business; born, Pawnee, Okla., June 13, 1895; son of C. J. Wrightsman and Edna Wrightsman.

Educated: Phillips Exeter Academy; Columbia University.

Professional: Oil producer.
Aeronautical Activities: Winner, efficiency trophy for sport model planes at American Legion Flying Meet, Kansas City, Nov. 2, 1921 in S.V.A. and 3rd place in Legion Open Derby.

Flying Rating: Naval Aviator.

Member: Aero Club of America.

Present Occupation: Oil business.
Address: 120 Broadway; home, Plaza Hotel, New York City.

Jacob W. S. Wuest

WUEST, JACOB W. S., Major, Air Service; born, Cincinnati, Ohio, June 24, 1880; son of Charles Wuest and Julia (Rapp) Wuest; married, Helen E. Strong, May 27, 1916.

Educated: Public schools of Cincinnati, Ohio; U. S. Military Academy, 1903.

Aeronautical Activities: U. S. Balloon School, Ft. Omaha, Nebr., May-Aug., 1918; School of Aerial Observers, Ft. Sill, Okla., Aug.—Sept., 1918; commanding U. S. Balloon School, Ft. Omaha, Nebr. and Experimental Station for Lighter-than-Air Craft, Ft. Omaha, Sept. 1918 to Sept. 1920.

Flying Rating: Aerial Observer, July 1918; Junior Military Aeronaut, July 1918; Free Balloon Pilot July 1918.

Member: Aero Club of America; Omaha Athletic Club.

Present Occupation: Student, General Staff School, Ft. Leavenworth, Kans.

Address: Ft. Leavenworth, Kans.; home, College Hill, Cincinnati, Ohio.

William Byington Wynn

WYNN, WM. BYINGTON, Captain, U. S. Air Service; born, Brandon, Miss., Jan. 26, 1893; son of Josephus Wynn and Minerva C. Wynn; married, Gormaine Soude, Dec. 23, 1918.

Educated: Brandon High School.

Professional: Farmer until 18 years of age; Mercantile business, 1912-1915; Enlisted in 4th U. S. Infantry (Reg.) Jan. 28, 1915; Commissioned 2d Lieut., Nov. 26, 1916.

Aeronautical Activities: Arrived in France, June 26, 1917 with 1st Division; sent to French Aerial Observer's school, Sept. 26, 1917; Graduated Dec. 1, 1917; U. S. Instructor Aerial Observation at Amanty, France, Dec. 1, 1917 to

Jan. 15, 1918; Instructor Aerial Observation Tours, France, Jan. 20 to Sept. 15, 1918.

Flying Rating: R. M. A. July 1918; Aerial Observer, Dec. 1917.

War Honors: Citation by Gen. Pershing for bravery in St. Mihiel battle, Sept. 13, 1918.

Books: President of Board of Officers to write Observation Manuals for the A. E. F., March 1 to June 1, 1919.

Present Occupation: Capt. U. S. Air Service.

Address: Carlstrom Field, Arcadia, Fla.

Robert Sam Yarborough

YARBOROUGH, ROBERT SAM, Power Engineer; born, Farmers, N. C., April 22, 1895; son of Whitson B. Yarborough and Martha Jeanette Yarborough; married, Sue Webb, Nov. 23, 1919.

Educated: High schools, Lexington, N. C.; three years, University of North Carolina.

Professional: Automobile business 1915-1917; Asst. Mgr. and Treas., Georgia Alabama Power Co., 1920-1921.

Aeronautical Activities: Ground School, Ga. School of Tech., 1917; flying training, Kelly Field, Nov. 1917; commissioned 2nd Lieut. Jan. 1918; instructor, Kelly Field, Jan. to April 1918; instructor in all stages at Belleville from April 1918 to March 1920.

Flying Rating: Recommended for pursuit pilot.

Present Occupation: Asst. Mgr. and Treas., Georgia Alabama Power Co.

Address: Albany, Ga.

Hector B. Yates

YATES, HECTOR B., Teacher; born, Trenton, Tenn., Aug. 24, 1891; son of L. F. Yates and Florence Callis Yates.

Educated: Peabody High School, Trenton, Tenn.; Fitzgerald and Clarke School; B.A. 1915, University of Tennessee.

Professional: Teacher in public schools, 1915-1917; teacher in South Park High School, Beaumont, Tex. and Forest Avenue High School, Dallas, Tex., 1919-1921.

Aeronautical Activities: Jan. 1918, School of Military Aeronautics, Austin, Tex.; training at Camp Dick, Post Field; discharged Feb. 1919.

Flying Rating: Airplane Observer, Oct. 16, 1919.

War Service: As above.

Present Occupation: Teacher.

Address: Forest Avenue High School, Dallas, Tex.; home, Trenton, Tenn.

Franklin Young

YOUNG, FRANKLIN, Mining; born, St. Joseph, Mo., Dec. 14, 1893; son of Benjamin Franklin Young and May Gertrude Young.

Educated: Public schools; Southern College.

Professional: American Motor Co., Battle Creek, Mich.; Chalmers Motor Car Co.; Packard Motor Car Co.

Aeronautical Activities: Ground School, Pensacola, Fla., 1917; flying training in A. E. F. at Tours and St. Raphael; received French Brevet, Oct. 17, 1917; Instructor, U. S. Naval Aviation School, Moutchic; advanced training at Issoudun; on duty Dunkirk, France and Bolsena, Italy; Instructor and Test Pilot, U. S. Naval Air Station, Key West, Fla.; flew planes from turret platform, U.S.S. Mississippi; Instructor in U. S. Naval Air Station, San Diego, Calif.

Flying Rating: French Brevet, Oct. 17, 1917; U. S. Naval Aviator No. 761; F.A.I. license, Aero Club of Italy No. 413, 1918; Brevetto Superior, Aero Club of Italy; Aero Club of America license No. 938, 1921.

War Service: U. S. Naval Aviation duty, April 1917 to June 1918; U. S. Naval Reserve Force, 1918 to date; inactive duty, Oct. 11, 1920.

Member: Aero Club of America.

Present Occupation: Mining.

Address: Ozona, Fla.

William C. Young

YOUNG, WILLIAM C., Balloon Business; born, Mineral Ridge, Ohio, Jan. 14, 1892; son of Lewis H. Young and Ida A. Young.

Educated: Public schools of Mineral Ridge, Ohio; 1913, Hiram College; B.S. 1915, University of Virginia.

Professional: Goodyear Tire & Rubber Co. since July 1916.

Aeronautical Activities: Balloon pilot, 1918; Airship Pilot, 1918; Instructor, Wingfoot Lake Air Station, 1918; U. S. Signal Corps, 1918-1919; Aeronautical Mechanical Engineer.

Flying Rating: Balloon and Dirigible Pilot, Aero Club of America.

War Service: U. S. Signal Corps, A.M.E., 1918-1919.

Member: Aero Club of America; Akron University Club.

Present Occupation: Manager, Aeronautical Department, Goodyear Tire & Rubber Co.

Address: E. Market St.; home, 1559 Manches-ter Road, Akron, Ohio.

Cole J. Younger

YOUNGER, COLE J., Bank Examiner; born, Norfolk, Nebr., June 14, 1894; son of H. R. Newmann and Mary H. Uewmann.

Educated: Northwestern University.

Professional: Bank Examiner.

Aeronautical Activities: Joined U. S. Air Service, Paris, France, Aug. 1917; received French brevet at Tours, France, Sept. 1917; commissioned 1st Lieut., Jan. 1918; remained on flying status until release, June 1919; Vice Chairman, Contest Committee of American Flying Club in conduct of New York-Toronto Airplane Race and New York-San Francisco Airplane Race; Assistant Manager, 1920 New York Aero Show; Sales Manager, Ordnance Engineering Corp.

Flying Rating: Reserve Military Aviator, Sept. 1917.

War Service: As above.

Member: Aero Club of America; Chairman, House Committee, Aero Club of America.

Present Occupation: Bank Examiner.

Address: 720 Customs Bldg.; home, 230 Fifth Avenue East, New York City.

Clinton DeForest Youngs

YOUNGS, CLINTON DEFOREST, Manufacturer; born, Orangeville, Mich., April 30, 1878; son of Eugene D. Youngs and Amelia C. Youngs; married, Fannie M. Fenn, April 3, 1901.

Educated: Grammar and high schools.

Professional: Manufacturer of agricultural tools, 1902-1910; Vice President and Superintendent of Fenn Mfg. Co., 1910 to date.

Aeronautical Activities: Trained at various fields during War.

War Service: Commissioned 2nd Lieut., Air Service; detailed to Engineering Department as Officer in Charge of Aero Repair; had charge of assembly, repairing and testing of planes; commissioned 1st Lieut., 1918.

Present Occupation: Manufacturing.

Address: 567 No. Cochrane Ave., Charlotte, Mich.

Barton Kyle Yount

YOUNT, BARTON KYLE, Major, Air Service; born, Troy, Ohio, Jan. 18, 1884; son of Noah Yount and Ivy K. Yount; married, Mildred A. Parker, Sept. 29, 1914.

Educated: Public Schools, Troy, Ohio; Ohio State University, 1902-1903; U. S. Military Academy, 1907.

Professional: 2nd Lt. 27th Inf., 1907; 1st Lt. May 1913; Capt. 15th Inf., Oct. 1916; Major, Signal Corps, Aug. 1917; Lt. Col., Air Service, Aug. 1918; Major, Air Service, July 1920.

Aeronautical Activities: Commanding Officer, School of Military Aeronautics, Austin, Tex., Oct. 1917 to Sept. 1918; Commanding Officer, Camp Dick, Dallas, Tex., Sept. 1918 to Nov. 1918; Office, Chief of Air Service, Washington, D. C., Nov. 1918 to Feb. 1919; under flying instruction, Rockwell Field, Coronado, Calif., Feb. 1919 to July 1919; Commanding Officer, March Field, Calif., July 20, 1919 to June 26, 1921; O.C.A.S., June 26, 1921 to date.

Flying Rating: Airplane Pilot.

Member: Aero Club of Southern California; Army and Navy Club.

Present Occupation: Office, Chief of Air Service.

Address: Munitions Bldg., Washington, D. C.

Albert Francis Zahm

ZAHM, ALBERT FRANCIS, Physicist; born, New Lexington, Ohio; son of J. M. Zahm and M. E. (Braddock) Zahm.

Educated: Cornell University, 1892; Ph.D., Johns Hopkins University, 1898.

Professional: Professor Mathematics and Mechanics, 1890-1892, University of Notre Dame; Associate Professor of Mechanics, 1895-1907, Professor 1907, Catholic University of America.

Aeronautical Activities: Delegate to International Conference on Aerial Navigation, 1893, 1900; Inventor of aeronautical appliances and research apparatus; author of more than 200 aeronautical papers and reports.

Member: Philosophical Society, Washington.

Author: Aerial Navigation.

Present Occupation: Scientific Study and writing; in charge of Aerodynamical Laboratory of U. S. Navy.

Address: Construction Department, Washington Navy Yard, D. C.; home, Cosmos Club, Washington, D. C.

Cyrus Johnston Zimmermann

ZIMMERMANN, CYRUS JOHNSTON, Test Pilot; born, Iroquois, S. D., Aug. 16, 1892; son of Charles F. Zimmermann and Amy (Bordman) Zimmermann; married, Hulda Cornelia Roberts, June 25, 1921.

Educated: Public schools of San Juan, Porto Rico; St. Pauls Preparatory School, Garden City, L. I., N. Y.

Professional: Automobile business, 1911-1913; fruit farming, 1913-1916; aircraft, 1916-1917.

Aeronautical Activities: 1917, Curtiss Company in Buffalo and The Curtiss Exhibition Co., learning to fly; 1917, Student Flying Instructor at Mineola; Junior Flying Instructor, 1917-1918, Wichita Falls, Tex.; 1918, Senior Flying Instructor,

Dayton, Ohio; Dec. 1918 to date, Chief Test Pilot, Aeromarine Plane & Motor Co.

Flying Rating: Federation Aeronautique Internationale, Sept. 1917 No. 846, Aero Club of America; Reserve Military Aviator, March 1918.

Present Occupation: Chief Test Pilot, Aeromarine Plane & Motor Co.

Address: 42 Atlantic St., Keyport, N. J.

James Leroy Zimmerman

ZIMMERMAN, JAMES LEROY, Homesteading; born, Ulysses, Nebr., Jan. 29, 1895; son of Elbert Burton Zimmerman and Mary Celestia (Wolcott) Zimmerman; married, Neta Naomi Crangle, June 9, 1920.

Educated: Public school, Lincoln, Nebr.; Doane Academy, Crete, Nebr.; Doane College; Casino Tech., Pittsburgh, Pa.

Professional: Commercial flying, 1920; Elec. Eng. at Westinghouse Electric Co., Mansfield, Ohio, to March 1921.

Aeronautical Activities: Ground School, Champaign, Ill.; primary flying and R.M.A., Kelly Field; advanced course in combat at Issoudun, France, 1918-1919; ferry pilot and courier at 1st Air Depot, France; passenger carrying in JN4D for Clarinda Aero Co., Clarinda, Iowa, 1919-1920.

Flying Rating: Reserve Military Aviator, Dec. 1919.

War Service: A.S.S.R.C., July 1917 to Sept. 1919.

Member: Aero Club of America.

Present Occupation: Homesteading.

Address: Glendo, Wyo.; home, 2020 S. 18 Street, Lincoln, Nebr.

Paul Gerhard Zimmermann

ZIMMERMANN, PAUL GERHARD, Aeronautical Engineer; born, Iroquois, S. D., May 12, 1890; son of Charles Frederick Zimmermann and Amy (Bordman) Zimmermann; married, Marguerite Wetsel, April 12, 1915.

Educated: Public schools, Sioux Falls, S. D., San Juan High School; M.E. 1913, Rensselaer Polytechnic Institute, Troy, N. Y.

Professional: Knox Auto Co., 1913-1914; Curtiss Aeroplane and Motor Co., 1914 to 1917; Engel Aircraft Co., Miles, Ohio, 1917 to 1918; 1918 to present, Engineer in Charge, Aeronautic Division, Aeromarine Plane and Motor Co.

Aeronautical Activities: As above.

Member: Aero Club of America; University Club of Buffalo; Key Port Yacht Club.

Present Occupation: Engineer in Charge, Aeromarine Plane and Motor Co.

Address: 85 Osborn St., Key Port, N. J.

ADDENDA**Biographies Received too Late to Include in Alphabetical Position****Frithiof Gustaf Ericson**

ERICSON, FRITHIOF GUSTAF, Commercial Aviation; born, Stockholm, Sweden, July, 24, 1880; son of Eric Gustaf Ericson and Elisabeth (Kallsten) Ericson; married, Eileen B. Shallow.

Educated: Public and preparatory schools, Visby, Sweden; Technical College, Stockholm, Sweden; studied at Copenhagen, Berlin, Marienfelde and Frankfurt.

Professional: 1899-1909, Engaged in automotive engineering in Stockholm, Sweden. (immigrated to U. S. A. 1909) 1909-1912, engaged in automobile industry; 1913, joined Tom Benoist and Jannus Bros. in aeronautical work; 1914 until May 1915, Manager, Jannus Bros. Aviation Co.; 1915-1916, Chief Engineer, Curtiss Aeroplanes & Motors Ltd., Toronto; 1916 to Nov. 1918, Chief Engineer and Designer for Imperial Munitions Board Aeroplane Factories in Canada; 1919, purchased entire R.A.F. Canadian Equipment; since 1920, Pres. and Managing Director, Ericson Aircraft Ltd., Toronto, Canada.

Aeronautical Activities: First flight in heavier-than-air machine with McCoy at Superior, Wis. in 1910; first solo flight in 1914; co-designer Jannus Flying Boat, 1913-1914; 1915, co-designer "Canada", bombing plane; designed the "Canuck" (Canadian J.N.) Jan. 1917; first to design practical type of skies for aeroplane; during the War, member International Standards Board, British Inventions Board, Canadian Air Board; during first half of 1918, visited England, France and the Front as representative U. S. Air Board;

assisted in design of F5L Flying Boats and manufactured 30 of same for U. S. Navy.

Flying Rating: F.A.I. Certificate No. 5 (Canada).

Member: Director, Aero Club of Canada; Life Fellow, Royal Aeronautical Society G. B.; Chairman, International Power Boat Union; Commodore Hamilton Motor Boat Club; Society of Automotive Engineers; Buffalo Launch Club; Chicago Yacht Club; Baltimore Athletic Club; The Lambs Club; Old Colony Club; Engineers Club of Toronto; Motor League of Canada.

Present Occupation: President and Managing Director, Ericson Aircraft Limited.

Address: 120 King Street, E., Toronto, Canada; (summer), Valhalla, Freeman, Ontario.

Robert Clarke Murray

MURRAY, ROBERT CLARKE, Student; born, Smyrna, Asia Minor, Oct. 18, 1896; son of Rev. James Murray, D. D. and Elizabeth K. Murray.

Educated: Gordon's College, Aberdeen, Scotland; White Bear High School, White Bear Lake, Minn.

Aeronautical Activities: 1918, Training as observer in England; 1918-1919, with Royal Air Force as observer; took pilot's training under Lt. Harold G. Peterson; employed by the Harold G. Peterson Aircraft Co. during the summer.

Flying Rating: Flying Observer.

War Service: 1915-1917, Canadian Infantry; 1917-1918, Royal Garrison Artillery; 1918-1919, Royal Air Force.

War Honors: British Military Medal received

at Ypres, July 1916; British Distinguished Conduct Medal received at Vimy.

Member: Aero Club.

Present Occupation: Student at University of Minnesota during winter and flying with H. G. Peterson Aircraft Co. during summer.

Address: White Bear Lake, Minn.

Leon Nelson

NELSON, LEON, Packer and Carlot Dealer, Poultry and Eggs; born, Johnstown, Nebr., Sept. 23, 1891; son of Nels C. Nelson and Serina M. Nelson.

Educated: Public and high school; 1909, Morningside College, Sioux City, Iowa; Boyles Business College, Omaha, Nebr.

Professional: Ranching to 1908; insurance, real estate and live stock to 1912; automobile distributor in various states and professional automobile races to 1917; 1919-1921, drilling, promotion and leasing; 1921 to date, Poultry and Eggs.

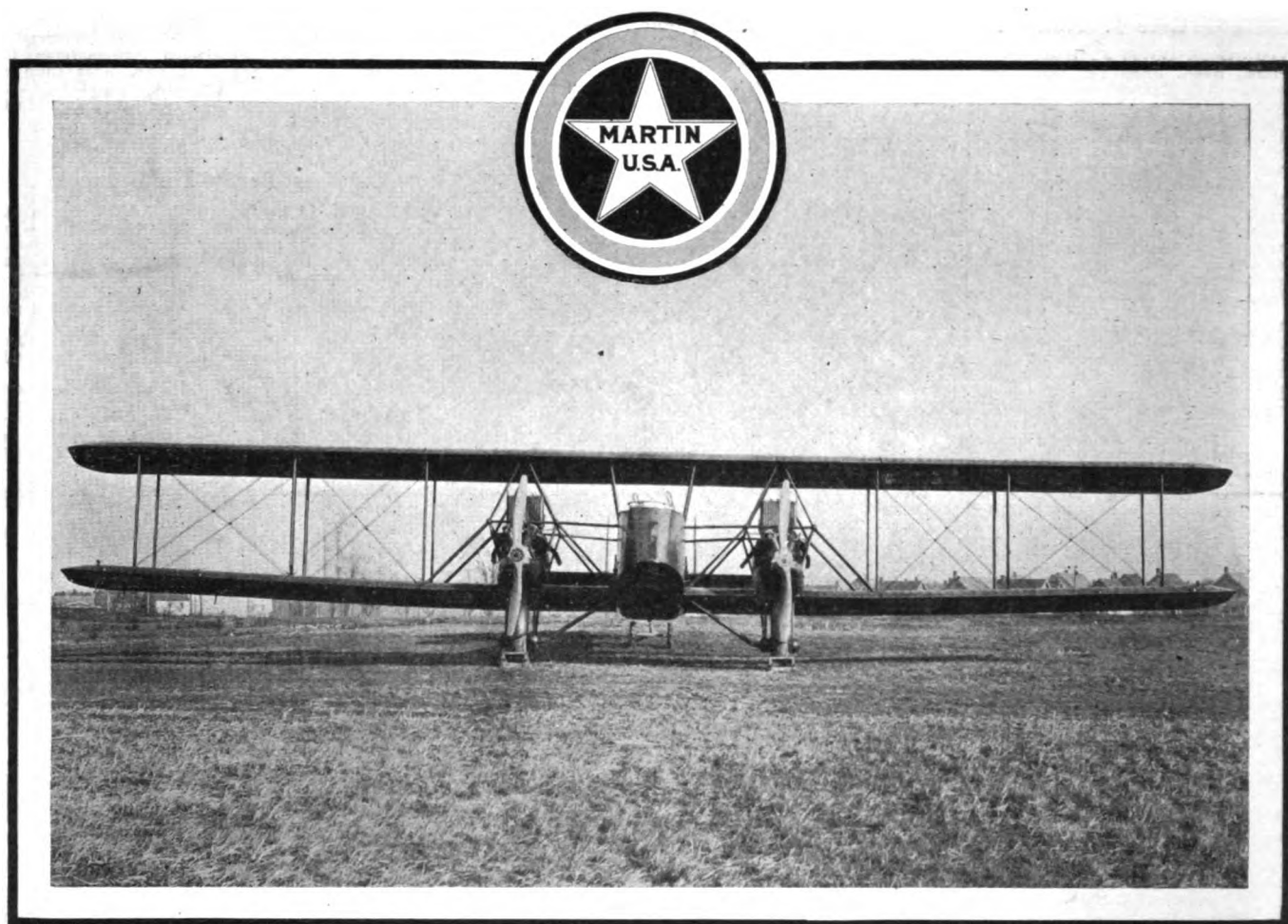
Aeronautical Activities: Training at Bay Shore, L. I., Pensacola and Miami, Fla., 1917-1918; Northern U.S.N.A.F. F.S. Killingholme, Eng., 1918; Flanders Front, France, 1918.

Flying Rating: Ensign, U.S.N.R.F., Aug. 1918.

Member: Military Order of World War; American Legion.

Present Occupation: Partner, Nelson Bros. Poultry Co.

Address: 701 - 0 Street; home, 1748 Euclid Ave., Lincoln, Nebr.



An Unmatched Organization

THE GLENN L. MARTIN plant was located, designed and built with the single purpose of making it the production headquarters of the best airplane which it was possible to make for America.

The personnel was chosen and co-ordinated with the same end in view.

The organization has been carefully developed and trained through years of successful airplane construction and de-

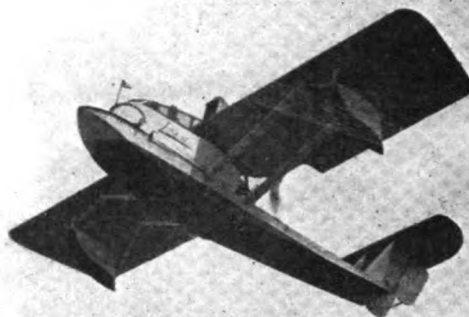
sign. A competent and efficient personnel cannot be built up from units hastily collected from many and varied sources in other lines of endeavor. It must have a fundamental training in the best practices. It must carry on continual experimentation and research if its production is to stand unchallenged.

Such an organization is responsible for the unquestioned superiority of the Glenn L. Martin Bomber.

THE GLENN L. MARTIN COMPANY

CLEVELAND

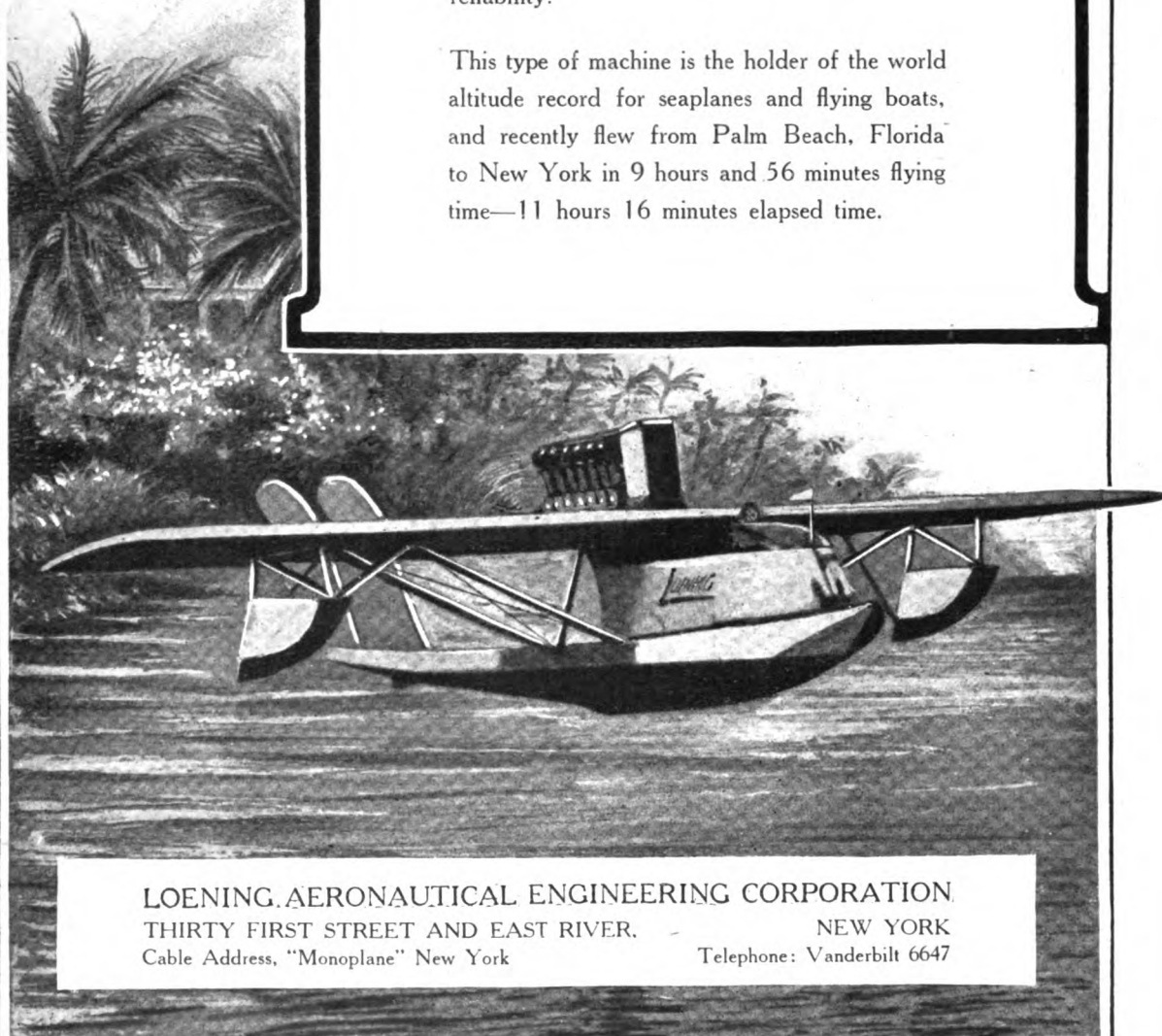
THE *LOENING* AIR YACHT



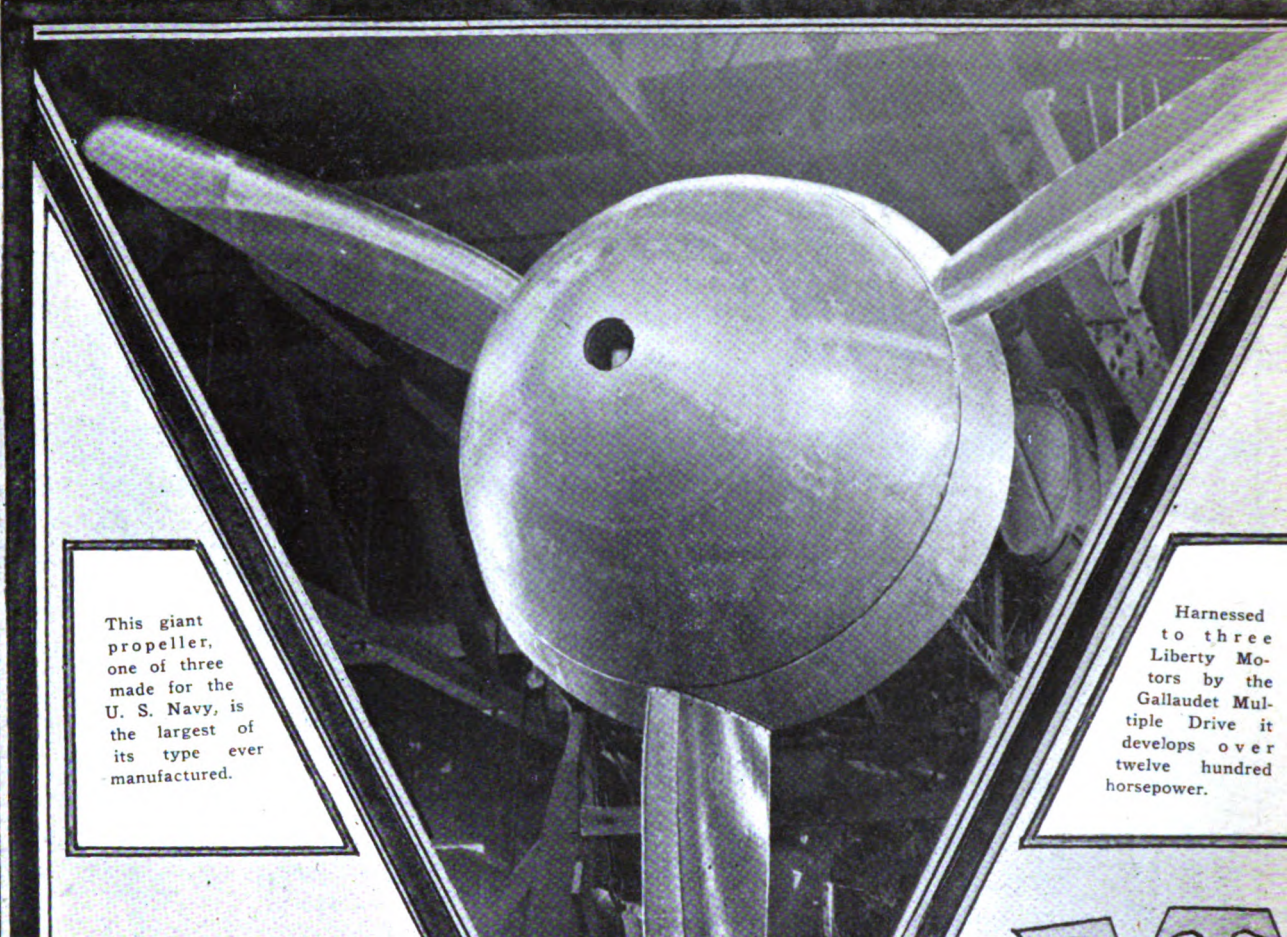
LOENING AIR YACHTS

are noted for their great speed, comfort and reliability.

This type of machine is the holder of the world altitude record for seaplanes and flying boats, and recently flew from Palm Beach, Florida to New York in 9 hours and 56 minutes flying time—11 hours 16 minutes elapsed time.



LOENING AERONAUTICAL ENGINEERING CORPORATION
THIRTY FIRST STREET AND EAST RIVER, NEW YORK
Cable Address, "Monoplane" New York Telephone: Vanderbilt 6647



This giant propeller, one of three made for the U. S. Navy, is the largest of its type ever manufactured.

Harnessed to three Liberty Motors by the Gallaudet Multiple Drive it develops over twelve hundred horsepower.

THE GALLAUDET MULTIPLE DRIVE

EFFICIENCY PLUS SAFETY

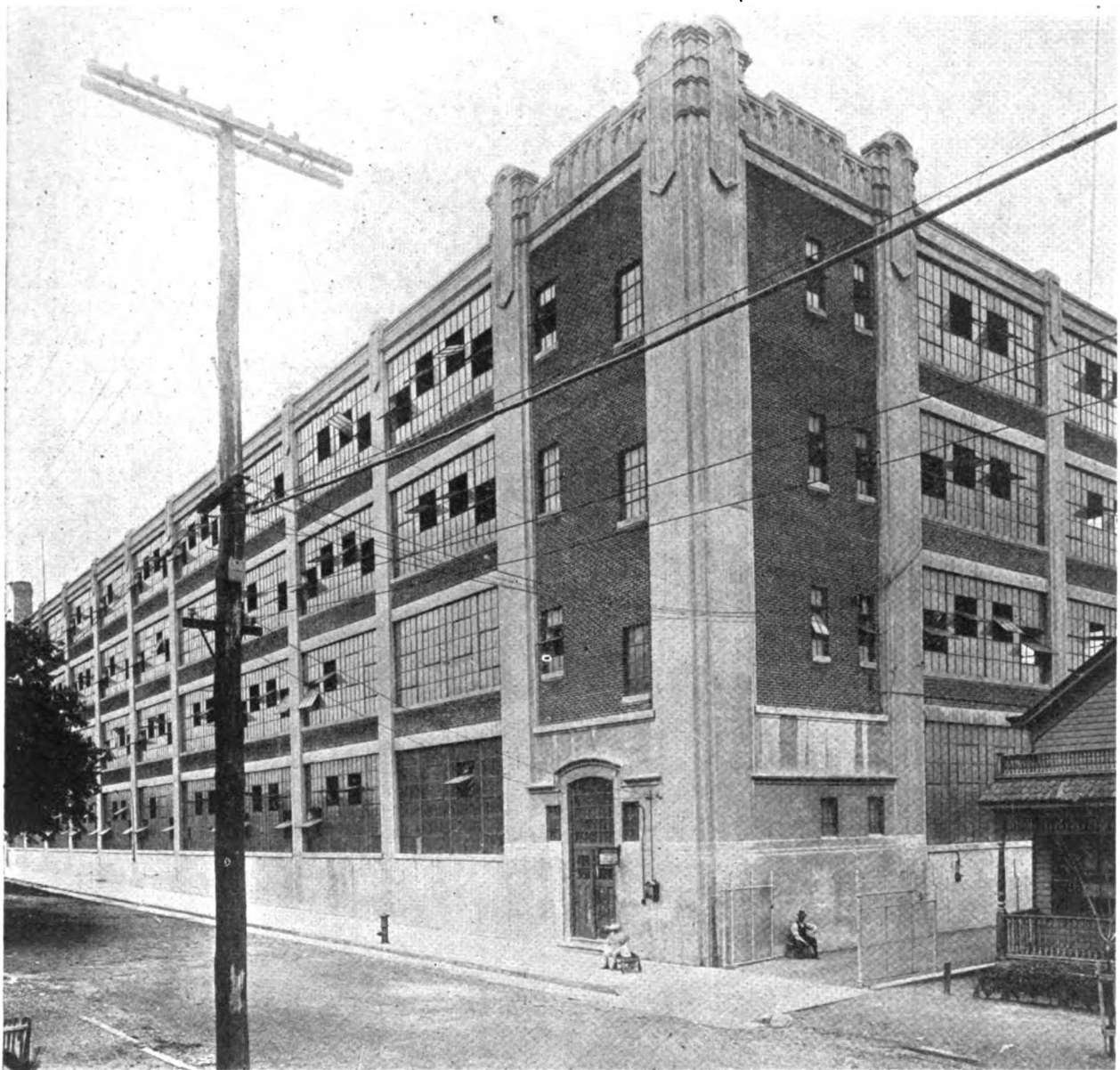
Paramount amongst its many advantages the Gallaudet Multiple Drive makes possible the Long Flight without stops for engine adjustment. **COMMERCIAL AVIATION'S GREATEST ASSET.**

GALLAUDET AIRCRAFT CORPORATION

EAST GREENWICH, R. I.

N. Y. OFFICE, 522 FIFTH AVE.

Members: Manufacturers Aircraft Assn. and Aeronautical Chamber of Commerce.

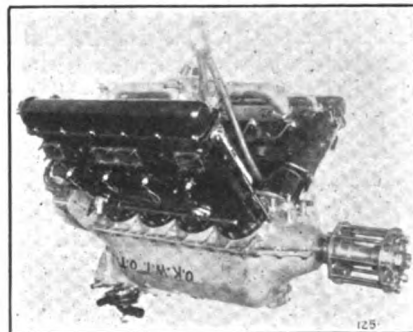


THE WRIGHT PLANT

The entire facilities of this organization are devoted exclusively to the development and manufacture of Aeronautical Engines.

WRIGHT AERONAUTICAL CORPORATION

PATERSON, N. J.



"Wright engines for air service"



The following are a few of the contributions of the Curtiss organizations to the advancement of Aviation listed by dates.

- July 4, 1908:** Glenn H. Curtiss made the first previously announced flight in public. Flight being made at Hammondsport, New York. On the same date Mr. Curtiss won the Scientific American Trophy in open competition in America.
- Aug., 1909:** Mr. Curtiss won the Gordon Bennett International Speed Trophy at Rheims, France.
- May 29, 1910:** Mr. Curtiss flew from Albany to New York, this being the first city to city flight ever made.
- June, 1910:** At Hammondsport, New York, Mr. Curtiss demonstrated the possibilities of bomb dropping.
- Aug., 1910:** J. A. D. McCurdy, in a Curtiss plane, was the first to send and receive wireless messages from an aeroplane in flight.
- Jan., 1911:** Eugene Ely, in a Curtiss plane, was the first to alight on and fly from the deck of a battleship.
- Jan. 26, 1911:** Mr. Curtiss "took off" on San Diego Bay, this being the first attempt to fly from the water.
- Feb. 23, 1911:** Mr. Curtiss flew from land to water and from water to land at San Diego, California.
- April, 1911:** U. S. Navy adopted the Curtiss aeroplane as a practical air and water craft.
- June, 1911:** Lincoln Beachey, piloting a Curtiss plane, was the first to fly over Niagara Falls and through the gorge.
- Aug. 1, 1914, to June 30, 1919:** During this period the Curtiss Aeroplane & Motor Corporation manufactured and shipped the following planes and motors:

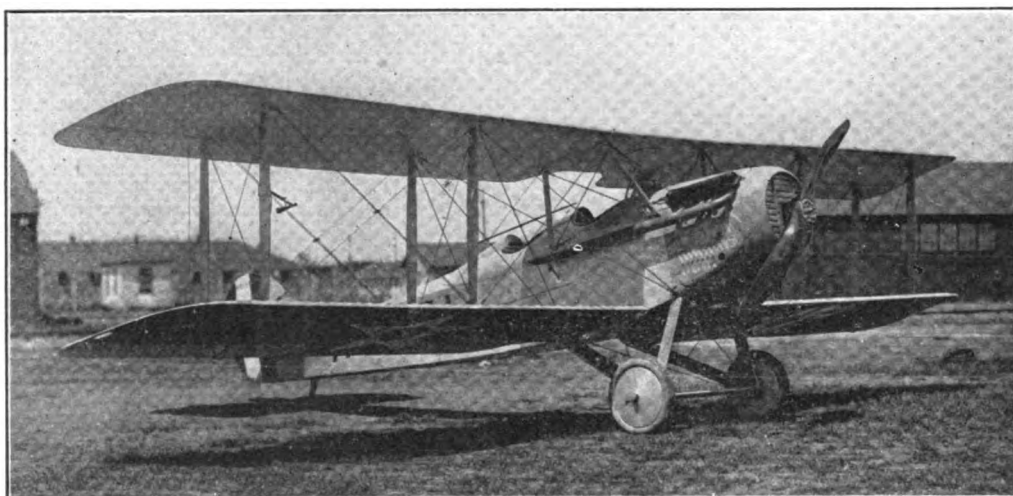
PLANES		MOTORS	
JN PLANES	4627	OX	4936
L TRIPLANES	4	V's	353
N9 SEAPLANES	110	MISCELLANEOUS MOTORS	3
R PLANES AND SEAPLANES	407		
F BOATS	105		
MISC. PLANES	16		
AIRSHIPS	15		
K BOATS	56		
SEAPLANE SCOUTS	11		
SEAPLANES	16		
HS BOATS	1712		
TOTAL PLANES	7079	TOTAL MOTORS	5292

- May 27, 1919:** The "Navy Curtiss 4" successfully flew across the Atlantic Ocean, leaving Rockaway Beach, Long Island, May 16, 1919, and reached Plymouth, May 31, 1919.
- Sept. 18, 1919:** Roland Rohlfs piloting the Curtiss "Wasp" set a new official world's altitude record without special plane or motor accessories, of 34,910 feet.
- Oct. 31 to Nov. 5, 1921:** C. S. Jones piloting a stock Curtiss C-6 Oriole won the Legion Junior Derby Race at Kansas City. Mr. Jones also won the Omaha 90 mile race in the same plane. Curtiss K-6 Orioles also took second and third prizes in this race. Lloyd Bertaud in a Curtiss K-12 Balilla won the American Legion Free-For-All at Kansas City, Mo. F. A. Donaldson in a Curtiss OX-5 Oriole won the Omaha 95 mile race. Bert Acosta flying the Curtiss Navy Racer won the Pulitzer Trophy Race at Omaha, Nebraska, and in so doing established a new speed record in contest flying of 176.7 miles per hour.

The Curtiss organization has designed over 200 types of planes and 25 types of motors.

CURTISS AEROPLANE & MOTOR CORPORATION
GARDEN CITY  **LONG ISLAND**

Aéroplanes **VOUGHT**



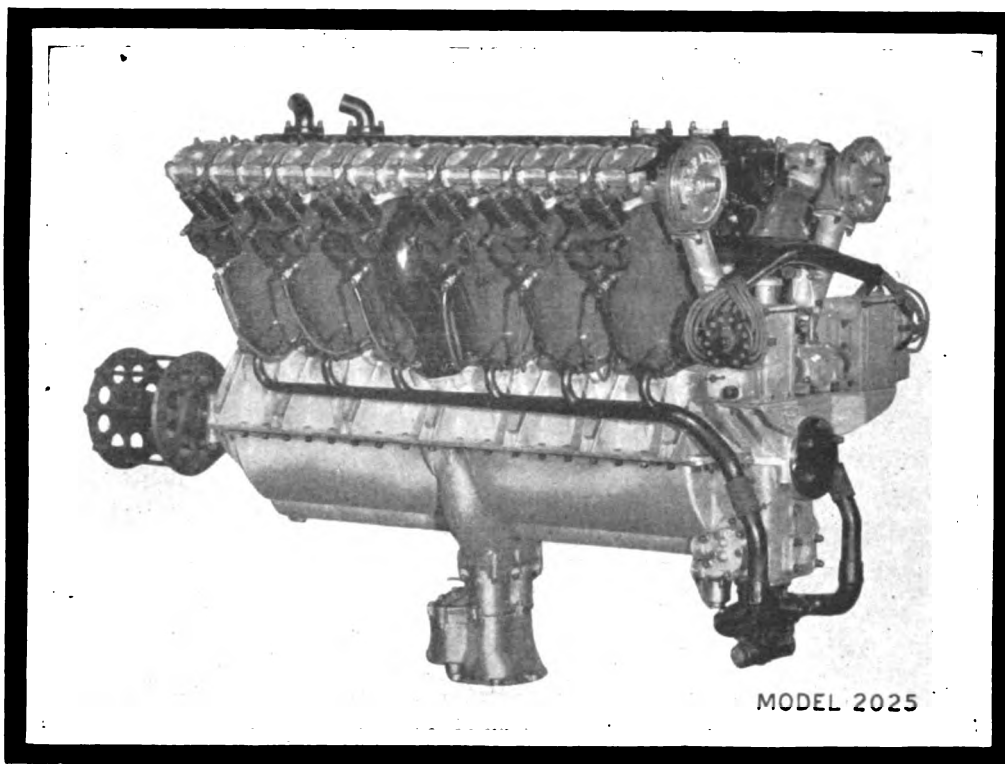
A 180 HP Wright E-2 Motored Two-Seater Dual Training and Sport Airplane --

So good as to positively Excel the Attributes and Performances of Single-Seater Pursuit Planes Powered with Engines up to 300 HP

Easy Maintenance, Low Operating Cost and Longevity Assured

CHANCE M. VOUGHT
AND
LEWIS & VOUGHT CORPN.
LONG ISLAND CITY, NEW YORK





Our confidence in the future of Aviation in America is best evidenced by the complete line of Aircraft Engines which we are ready to announce after many years of development.

MODEL	HORSE-POWER
825	200 - 250
1237	300 - 375
1650	400 - 440
2025	550 - 625

Specifications, prices and deliveries furnished on request.

PACKARD MOTOR CAR COMPANY

AIRCRAFT DIVISION

DETROIT, U. S. A.



Ask the man who flies one

COX-KLEMIN AIRCRAFT CORPORATION

Consulting, Designing and Constructing Engineers

Contractors to the Navy Department, Army Air Service and Air Mail Service.

COLLEGE POINT, L. I., N. Y.

An organization based on a completely equipped shop, highly trained technical department, and experienced shop personnel.

Designers and builders of airplanes and seaplanes of the highest finish, reliability and performance to meet commercial requirements of low initial cost and economy in operation. Quotations and preliminary designs submitted without charge.

IMMEDIATE DELIVERY ON THE FOLLOWING PLANES

- CK-1 9 Passenger Amphibious Flying Boat.
- CK-14 3 seater MF Flying boat with 150 H.P. Hispano motor.
- CK-4 3 seater Standard-Mercedes with 190 H.P. Mercedes.
- CK-5 4 seater Thick-wing Monoplane with 190 H.P. Mercedes.

NEW EUROPEAN MOTORS AVAILABLE

Mercedes 190 H.P.	-	-	Benz 150 H.P.
Hispano 150 H.P.	-	-	Hispano 180 H.P.

Consulting Department

Complete service available to Air Transportation Companies; Technical and Financial Studies; Equipment and Ground Organization.

Price lists for planes and motors, specifications and descriptions, price lists for spare parts and other information sent on request.



JL-6 All-Metal Monoplane

The Commercial Plane of Exceptional Performance

Economy

Safety

Durability

Holder of the most notable records for mileage, efficiency
and pay load per horse power and of the World's
Duration Record of 26 hours, 19 minutes, 35 Seconds

JOHN M. LARSEN

347 MADISON AVENUE, NEW YORK

FLY THERE!

IN AN *Aeromarine* FLYING BOAT
Reg. U. S. Pat. Off.

"Thousands of Passengers Carried—Not a Single Mishap"



AEROMARINE-NAVY ELEVEN PASSENGER AIR CRUISER IN HAVANA, CUBA

RATES and ROUTES - NORTHERN OPERATIONS AERIAL SIGHTSEEING FLIGHTS OVER NEW YORK

Flight No. 1.—The \$15.00 Flight leaves 82nd Street and flies up the Hudson to about Grant's Tomb and down along the Battery circling the Statue of Liberty. This affords a wonderful view of the city with its architectural wonders, the Palisades and the Ramapo Mountains of New Jersey.

Flight No. 2.—The \$25.00 Flight makes a complete circuit of the Island of Manhattan; flying down the Hudson around the Battery and Statue of Liberty, up the East River past Hell Gate, the Bronx, and then down the Hudson River.

AEROMARINE ROUTE NO. 1

Time	Rate	Time	Rate
Mins.		Mins.	
New Rochelle ... 20	\$20.00	New Haven ... 60	\$40.00
Stamford, Conn. ... 35	25.00	New London ... 85	60.00
Norwalk ... 40	30.00	Fisher's Island ... 100	65.00
Bridgeport ... 50	35.00	Newport ... 140	75.00

AEROMARINE ROUTE NO. 2

Time	Rate	Time	Rate
Mins.		Mins.	
Glen Cove, L. I. ... 25	\$20.00	Sag Harbor ... 80	\$55.00
Huntington Bay ... 35	25.00	Gardiner's Is. ... 95	60.00
Port Jefferson ... 50	35.00		

AEROMARINE ROUTE NO. 3

Time	Rate	Time	Rate
Mins.		Mins.	
Long Beach ... 22	\$20.00	Southampton ... 75	\$50.00
Patchogue ... 60	40.00	East Hampton ... 80	55.00
East Port ... 70	45.00		

AEROMARINE ROUTE NO. 4

Time	Rate	Time	Rate
Mins.		Mins.	
Red Bank, N. J. ... 20	\$20.00	Asbury Park ... 30	\$25.00
Long Branch ... 22	20.00	(Landing in Shark River)	
(Landing in Shrewsbury River)		Island Heights ... 40	35.00
		Barnegat ... 60	40.00
		Atlantic City ... 75	50.00

LANDING PIERS

FOOT OF 82nd STREET, HUDSON RIVER - NEW YORK CITY

Phone Schuyler, 8017

Motor Route direct to landing, or Subway to 79th Street and walk two blocks west to River.

RATES and ROUTES - SOUTHERN OPERATIONS

Points	Length of Flight	Fare
Havana-Key West* ...	85 Min.	\$50.00
Miami-Bimini ...	40 "	25.00
Miami-Key West ...	105 "	60.00
Miami-Nassau ...	120 "	75.00
Tampa-Key West ...	180 "	100.00
St. Petersburg-Belleair Heights	Rate on application	

Special Charters—Hourly or Daily—By Appointment

* Connections with morning and evening trains to and from Key West.

AEROMARINE AERIAL SCENIC TOURS

Aerial flights over Florida's most beautiful scenery. The quickest, safest and most delightful means of viewing these and hundreds of other interesting sights, is from the air.

Fare according to distance.

Minimum Sightseeing Flight—\$5.00 per Passenger.

AEROMARINE AIRWAYS, Inc.

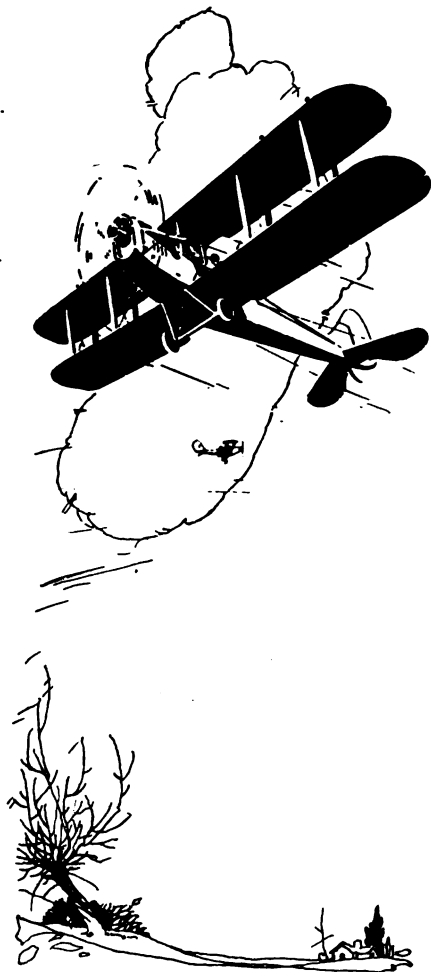
C. F. REDDEN, PRESIDENT.

The Largest Aerial Transportation Company in the World Operating Flying Boats.

EXECUTIVE OFFICES - 1800 TIMES BUILDING - NEW YORK

PHONES - BRYANT 4505 - 6147

"Be sure It's an Aeromarine"



Air Travelers
are invited
to make use of
our airdrome
and facilities
at Moraine City
Dayton, Ohio

DAYTON WRIGHT COMPANY

DIVISION OF
GENERAL MOTORS
CORPORATION

DAYTON, OHIO, U. S. A.



"The birthplace of the airplane"



LAWRANCE

AERO ENGINE CORP'N

Manufacturers of
Aircooled Engines

Contractors to The U.S. Army and Navy

644 W. 44TH Str. New York City



The Great Needs of the Country Today

ARE

IMPROVED TRANSPORTATION, which increases production by quickening distribution, and adequate security, which confers economic returns while protecting the nation's wealth. The steamship, railroad and motor car grew out of and developed with successive stages of human progress. New conditions have now arisen requiring these forms to be supplemented and extended, and commercial aircraft lift their wings to meet the universal demand.

A DUTY AND AN OPPORTUNITY

Your interest in aviation carries with it a duty as well as an opportunity. The privileges make their own advantageous appeal; but the fact that you have a certain knowledge of and contact with American aeronautics involves responsibilities which you can not avoid.

If the United States is to realize the proper development in commercial and service aviation, every firm, corporation, association, organization and individual interested must co-operate.

"America First!--In the Air and Everywhere!" can be approximated only through the co-ordination of all elements into a homogeneous whole.

The fliers who are the pioneers on the aerial frontier; the aircraft manufacturers and engine builders; the parts, accessory and instrument makers; the purveyors of supplies and materials; the dealers and distributors; the scientists, engineers and designers--and all those who are patriotically, professionally or personally interested are confronted right now with the responsibility and duty of uniting and laboring for the development of American aviation.

**AERONAUTICAL CHAMBER OF COMMERCE
OF AMERICA, INC.**

501 FIFTH AVENUE, NEW YORK

Member Chamber of Commerce of the United States

America First! — In the Air and Everywhere!

1922

Aircraft Year Book

THE AUTHORITY ON AVIATION

**EDITED AND ISSUED BY THE AERONAUTICAL
CHAMBER OF COMMERCE OF AMERICA, INC.**

Table of Contents

CHAPTER HEADINGS

- Chapter I. Review of Commercial Aviation During the Year—Aircraft Demonstrate Practical Utility—Significance of Aircraft Battleship Demonstrations—Air Law in Sight—Aeronautical Chamber of Commerce Organized.
- Chapter II. Problems of Aerial Transportation—Capital, Terminals, Reliability—Needs Which Can Be Met Through Aerial Law—Report to Secretary of Commerce on Safety in Flight.
- Chapter III. The Air Demonstrates its Command of the Sea—the Battleship Bombing and Conference on the Limitation of Armaments.
- Chapter IV. Review of Aeronautics Throughout the World, Nation by Nation.
- Chapter V. Technical Progress in Aircraft Construction During the Year.
- Chapter VI. Progress in Airship Construction and Navigation during the Year.
- Chapter VII. Aircraft Design Section. 35 Full page line drawings of Airplane and Engines.
50 full page illustrations depicting developments of Aviation During the Year, etc. etc.

AIRCRAFT DESIGN SECTION

APPENDIX

U. S. AIR SERVICE

BUREAU OF AERONAUTICS, NAVY

DEPARTMENT

MARINE CORPS

AERONAUTICAL BOARD

HELIUM BOARD

THE AIR MAIL

MISCELLANEOUS GOVERNMENTAL

NATIONAL ADVISORY COMMITTEE

FOR AERONAUTICS

AIR LAWS

RECORDS, ETC.

FOR SALE BY

THE GARDNER, MOFFAT CO., INC.

225 Fourth Avenue, New York

PRICE \$3.20 POST PAID

THOMAS-MORSE AIRCRAFT CORPORATION**CONTRACTORS TO U. S. GOVERNMENT****ITHACA,****NEW YORK****WHAT— !!*****Fly Without Insurance ?*****HARDLY !!****WHEN WE CAN ASSUME YOUR RISK.****THE HOME INSURANCE COMPANY****95 William St., New York City, New York****WIND STORM****PROPERTY DAMAGE****SEAPLANE MOORING PERILS****FIRE****COLLISION****THEFT**

PIONEER AIRCRAFT INSTRUMENTS

Air Speed Indicator
Banking Indicator
Compass
Running Lights
Signal Lights
Search Lights
Rate of Climb
Indicator
Gasoline Level
Gauge



Air Distance Recorder
Turn Indicator
Altimeter
Flight Indicator
Tachometer
Fuel System
Speed and
Drift Indicator
Course and
Distance Indicator

Contractors to the
Army Navy and
Post Office

Write for
descriptions
and prices

PIONEER INSTRUMENT COMPANY

MAIN OFFICE AND FACTORY BROOKLYN NEW YORK
WASHINGTON PARIS SAN FRANCISCO
441 STAR BUILDING 97 BOULEVARD SAINT MICHEL 839 POST STREET

C. C. WITMER

BECKWITH HAVENS

JAMES F. BOYLE

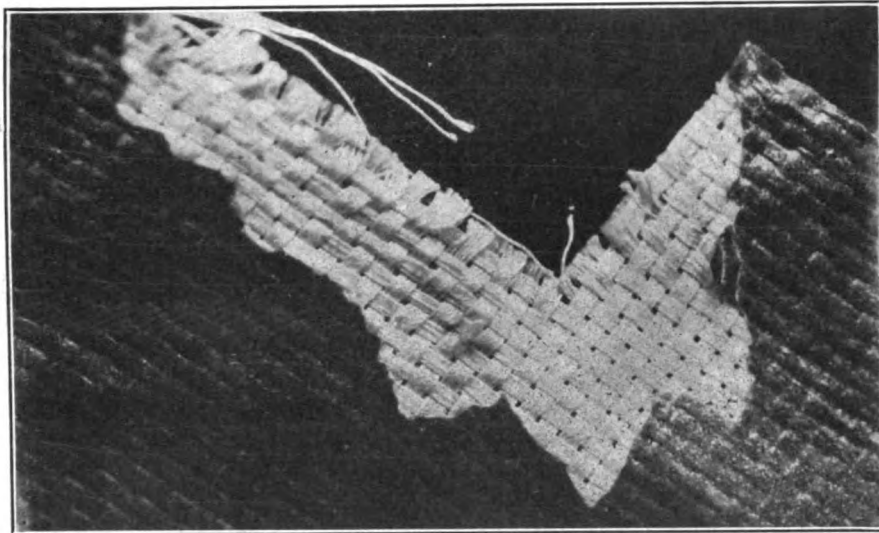


LIGHTER-THAN-AIR CRAFT

DESIGNERS AND BUILDERS

CONTRACTORS TO THE U. S. ARMY AND NAVY

Warwick
NON-TEAR
Aero-Cloth



*A safe
cloth
for flying*

Doped Cloth taken from wing panel Highly Magnified

MANUFACTURERS OF
AIRPLANE, BALLOON, DIRIGIBLE AND PARACHUTE CLOTHS.

For particulars apply to
WELLINGTON SEARS & CO.
66 WORTH STREET, NEW YORK



A.G. Spalding & Bros.

Aviation Equipment

In addition to the implements and equipment for every athletic sport, A. G. Spalding & Bros. maintain separate departments devoted to complete aviation clothing and accessories for the airmen.

If It's Spalding's, It's Right!

A. G. SPALDING & BROS.
NEW YORK CHICAGO
SAN FRANCISCO LOS ANGELES

FOR

THE SPERRY HIGH LIFT
WING

JN'S STANDARDS
AND CANUCKS

THE SPERRY SPORT
PLANE

AVRO'S AND PARTS
AND

WORLD FAMOUS SPERRY
INSTRUMENTS

THE LAWRENCE SPERRY
AIRCRAFT COMPANY INC.

FARMINGDALE LONG ISLAND, N. Y.
PHONE FARMINGDALE 133

FOR ANY ALTITUDE
OVER 200 FEET

THE JAHN PARACHUTE

is the only *positive, quick-opening, manually operated* parachute. It Can not fail.

On January 14th, 1922 at Miami, Florida, Jack Bonn left a ship under 200 feet and landed safely on a Building 40 feet high. Affidavits on file. Bonn has used the Jahn in 200 leaps.

THEY ARE MADE OF SILK

Investigate—Write for prices

JAHN AERIAL LIFE SAVING APPARATUS COMPANY

MFGS. AND PATENTEES

Montevideo,

Minnesota, U. S. A.



DESIGNERS AND BUILDERS OF THE METEORPLANE SPORTING AND COMMERCIAL TYPES

*Aircraft and Parts Built to Order
a Specialty*

IRWIN AIRCRAFT COMPANY

Established 1908

SACRAMENTO
CAL.

Pioneers in Maryland's Commercial Aircraft Industry

Our confidence in the future of aviation is best emphasized by the announcement of our new production, The "PIONEER" a three and four place high efficiency commercial monoplane.

In addition to all the latest features, this machine enjoys the advantages of quantity production and standardization. Low initial cost and upkeep are the economical results, as all the principal parts are interchangeable with the overproduction stock of standardized aircraft materials now on the market. Detailed information on request.

Our stock of "Canuck" and OX5 machines and parts is the most complete in the States. Exclusive dealers in brand new materials only.

Every normal person can learn to fly. Every purchaser will be taught free of charge.

Our own machines are used exclusively in our department of
OPERATIONS

AERIAL PHOTOGRAPHY
FLYING INSTRUCTION

AERIAL ADVERTISING
PASSENGER SERVICE

Let us quote you on this service.

AMERICAN AIRCRAFT, INC. BALTIMORE, MD.

Station F, Box 104

COMPLETE AND AUTHORITATIVE REFERENCE BOOK

Airplane Engine Encyclopedia

BY

GLENN D. ANGLE

in charge of the design of airplane engines
for U. S. Air Service

MAILED
POSTPAID
ON APPROVAL
TO SUBSCRIBERS
OF "WHO'S WHO"

CONTAINS:--

547 pages; 503 illustrations
Reference to 275 makes of engines
Reference to 858 models

\$7⁵⁰ per copy
— postpaid

AIRPLANE ENGINE ENCYCLOPEDIA CO.
930-931 Reibold Bldg. Dayton, Ohio

"Since 1910"

AIRCRAFT SUPPLIES

Aircraft Spruce or Ash, Fabric, Tape, Dope; Varnish, Wire, Cable, Fittings; Propellers; etc. We have unequalled facilities for securing anything Aeronautical. We build Aircraft of our own design or make same to your specifications. New and used Engines and complete Airplanes at reasonable prices. Specify your requirements. Write for our Supplies Price list.

OSTERGAARD AIRCRAFT WORKS

4269-4271 North Narragansett Ave.

CHICAGO, ILL., U. S. A.

THE OLD RELIABLE

Splendid Quality Reasonable Prices Fastest Shipments

Curtiss JN4D, Canuck, J-1 Standard and Oriole Airplanes, Flying Boats, New and Used OX5 and OXX6 Motors, and All Manner of Parts for said Airplanes and Motors.

New or Used K-6, C-6, Hispano and Mercedes, 150 H. P. to 190 H. P. Motors and Benz 120 H. P. Motors, and J-1 Standard airplanes equipped with any of these motors and arranged as 3 passenger ships.

Grade A Mercerized Cotton and Tape; Grade AA Linen; linen tape, Nitrate or Acetate Dope; all colors for finishing; Wing Covers, Shock absorber cord, 26 x 4 Tires and tubes, Propellers, Wings, Landing Gears, Resistal Non-shatterable Goggles, Dandy Leather Helmets, 1/4 in. Non-Flexible Cable, 5/32 in. Flexible and extra Flexible Cable, Wing Beams, Radiators, Longerons, Gas Tanks, etc.

ALL Manner of Supplies — Write for what you want.

FLOYD J. LOGAN

Phone Cherry 949

716 WEST SUPERIOR
CLEVELAND, OHIO



PROPELLERS OF QUALITY

We are conscientiously endeavoring to scientifically produce the most efficient and dependable aircraft propellers possible, regardless of first cost. Ultimately, they are the most economical. Our ability is backed by more than twelve years experience building and designing thousands of satisfactory propellers.

We have also developed a High-Lift Mono-plane Wing for commercial planes, taking place of inefficient biplane wings with struts and wires. Internal bracing reduces resistance thereby increasing speed, pay load and range.

May we send you our catalog?

HAMILTON AERO MFG. CO.
MILWAUKEE, WIS.

Contractors to

U. S. Navy, U. S. Air Mail, U. S. Air Service

AÉROPLANES

R. H. HAWLEY
President

VALENTINE GEPHART
V. Pres. & Gen.-Mgr.

PROPELLERS

INTERNATIONAL AIRCRAFT CO.

Consulting Engineers

119 Brush Creek Boulevard

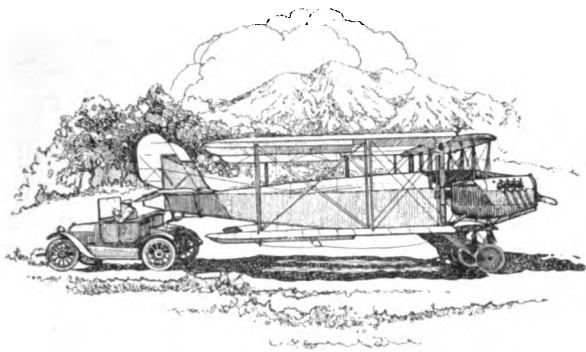
KANSAS CITY, MO.

ENGINES

Col. FRANCIS D. ROSS
Treasurer

CURTIS SMITH
Secty.

SUPPLIES



B. T. No. 15, WINGS FOLDED, BEING TOWED

1. Flies on one engine.
2. Minimizes fire hazard.
3. Slow landing speed.
4. Low cost of operation.
5. Insurance costs reduced.
6. Ability to land in rough country.
7. No fumes in the cabin.
8. Ease of maintenance.
9. Removable engine units.
10. Machines do not float.
11. Does not tire pilots in roughest of air.

*Send us your problems in commercial,
and transport work.*

BARNHART AIRCRAFT, Inc.,
Pasadena, Calif.

Johnson
The name you cannot forget

REMEMBER THIS. We are not brokers in business for a day. We have the courage of our convictions and carry everything we list in stock at our warehouses in Dayton. *This should be important to you.* Order from us and save time. If you are not satisfied it costs you nothing. It pays to deal with us.

Parts and accessories for practically every plane or motor used in this country.

Service
The kind you will not forget

Write for our catalog or information. Its free.

Johnson Airplane & Supply Co.
Dayton, Ohio

CHARACTER

As *aviation* is the comprehensive and euphonious word which at once pictures the history and progress of man's conquest of the air, so—



at once suggests the American magazine which, during the past six years, has contributed most to that progress.

Because of service, both within and beyond the printed page, the readers of AVIATION have come to consider it an integral and indispensable part of the aeronautic industry rather than a publication attempting to capitalize popular interest in aeronautics.

The influential part AVIATION has had in the development of American aeronautics is acknowledged by the leaders of military, naval and commercial flying, and by the foremost designers, constructors and pilots.

Men Who Know Read AVIATION

*Four dollars a year
Canada Five Dollars
Foreign Six Dollars*

THE GARDNER, MOFFAT CO., Inc.
225 Fourth Ave. New York

Who's Who in American Aeronautics

It contains 1000 biographical sketches, numerous photographs and a great deal of information of permanent reference value not heretofore brought together.

The table of contents includes

**State and Municipal Aviation Commissions
Army Air Service
Navy Bureau of Aeronautics
Air Mail Service
National Advisory Committee for Aeronautics
Officers and Committees, Aero Club of America
Officers and Committees, other Aero Clubs
Aeronautical Chamber of Commerce
Manufacturers Aircraft Association
Aircraft Underwriters' Association
American Aeronautic Safety Code
Advertising Section**

Who's Who In American Aeronautics is your own and your company's personal representative. It will serve to reestablish old contacts and to introduce you to new personal and business friends.

Collectively the 1000 biographical sketches of those prominent in aeronautics will inspire confidence in the industry on the part of business men, investors and financial interests.

You will undoubtedly wish several copies of "Who's Who" to place in the hands of people whose active interest will advance the cause of aviation.

One Dollar per Copy

THE GARDNER, MOFFAT CO., Inc.

225 4th AVE., NEW YORK.

DEC 1 - 1936

